2

THE NORTHERN DISTRICT SCHOOL OF NURSING

1ST YEAR

- GENERAL NURSING NOTES -

Student's Name..Heather Gamble.....

INDEX OF NOTES CONTINUED:-

The following areas are largely dealt with in the demonstration room.

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B E D M A K I N G

AIMS of Student: 1. To have the patient as comfortable as possible.

✓

(a) Attention to individual needs of patient.
(b) Observation of the patient.
(c) Prevention of pressure sores.

2. To have the nurse achieve:-

(a) Uniformity, neatness, speed with gentleness.
(b) Elimination of unnecessary movements.
(c) As few different styles as possible.
(d) Prevention of cross infection.

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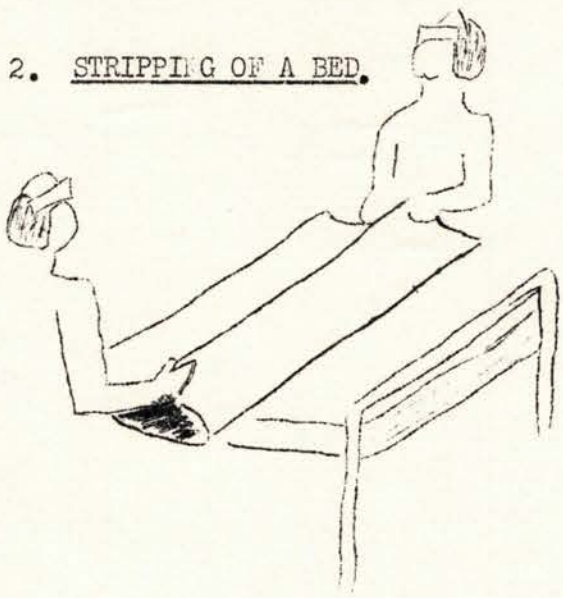
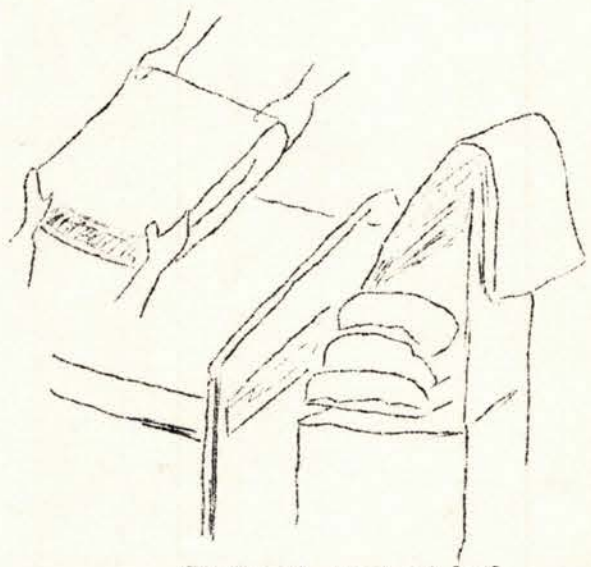
1. HOW TO MAKE AN UNOCCUPIED BED. Refer to Doherty, Sirl & Ring. Chapter 4, page 28.

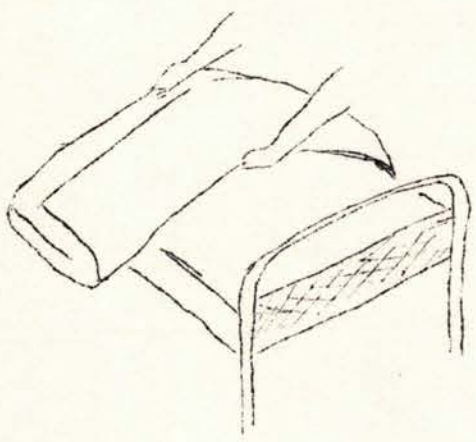
2. STRIPPING OF A BED.



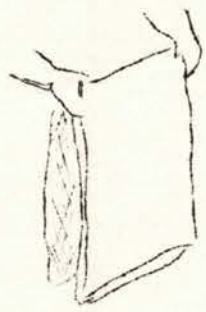
2 NURSES

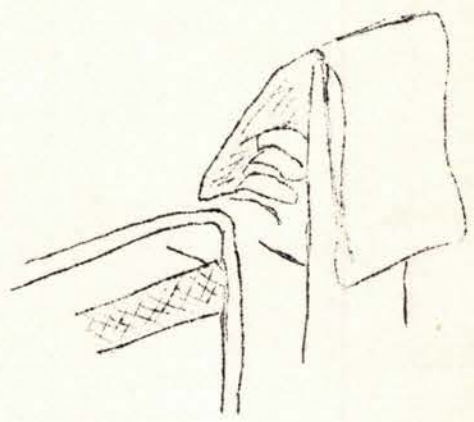


Chair at foot of bed.



1 NURSE



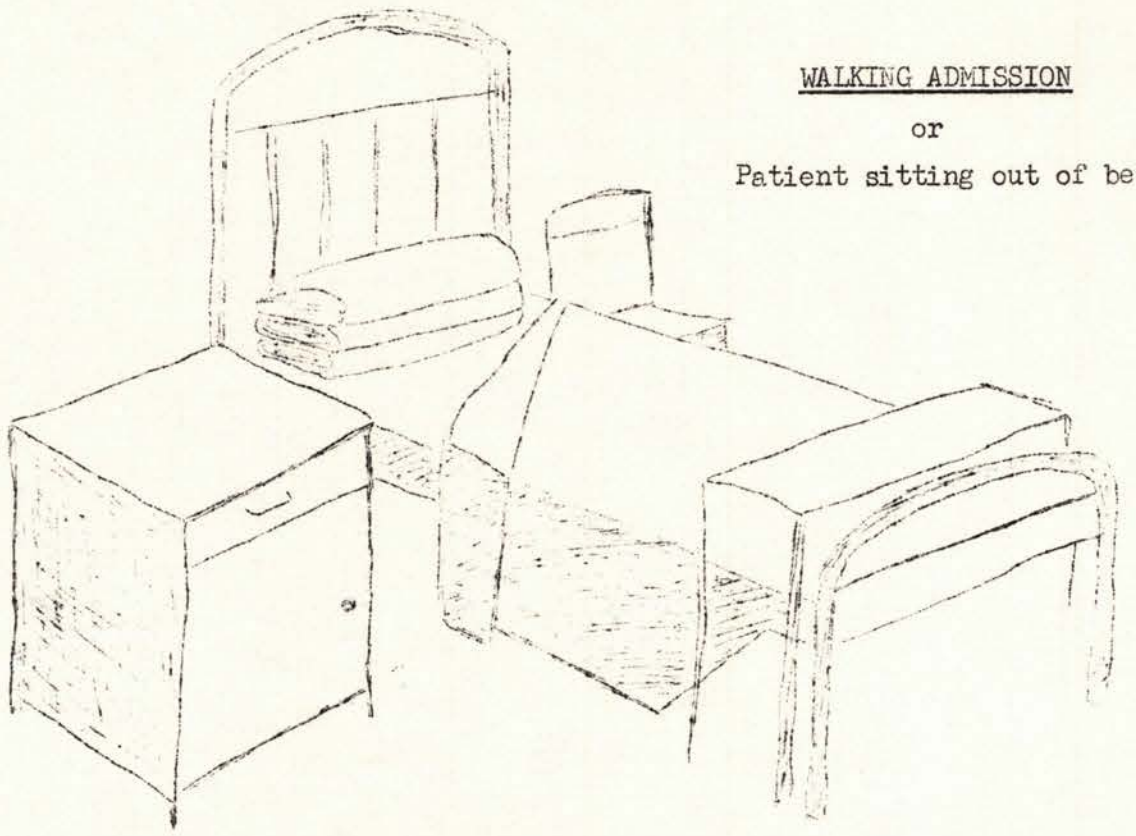


Chair at side of bed.

✓ When bedmaking, have in readiness (a) covered soiled linen carrier or bucket.
(b) clean linen when necessary.

Place pillows on chair.
Loosen bedding.
Work rhythmically with minimum disturbance of bedding.
Check rubber mattress correct side uppermost with cover fastenings at foot.
Do not use torn linen but return to sewing room for repair.
Avoid unnecessary extravagance in use of linen.

ADMISSION BEDS.

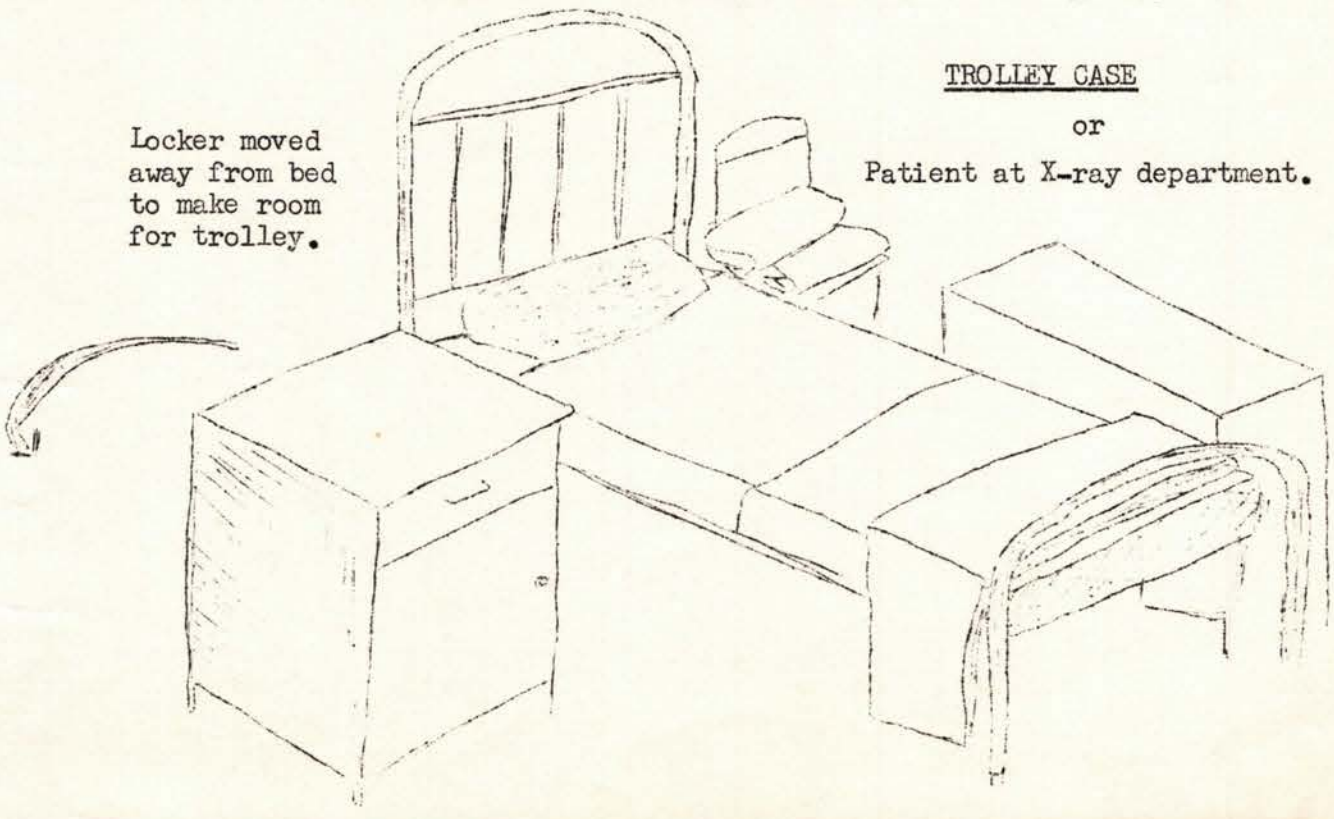


WALKING ADMISSION

or

Patient sitting out of bed.

ALL NEW PATIENTS. Greet patient by name and make feel welcome.
Admission nurse checks papers for phone number, religion, permission for anaesthetic if patient for operation.
Temperature, pulse, respirations, and blood pressure are taken.
Urine is tested and abnormalities reported to sister.
Clothes and valuables remaining in hospital are recorded, labelled and locked away. (See lecture no.4).
Permission from sister before giving patient food or fluid.
Bedcard attached to bed.
Senior nurse carries out any doctor's orders. Sister notifies resident medical officer of patient's arrival.
Before admission additional requirements assembled at bedside according to specific case - e.g. extra pillows, cradle.
The patient is seen to be comfortable - introduced to neighbours, ward routine explained as indicated.



Locker moved away from bed to make room for trolley.

TROLLEY CASE

or

Patient at X-ray department.

ADMISSION BEDS

EMERGENCY ADMISSION BED. The upper bedclothes are made into a pack to facilitate transfer of patient from trolley.
Additional requirements depending on type of case and anticipated condition of patient.
In any case where soiled clothes are expected, e.g. road accident case, 2 small clean old blankets are used to protect bed.

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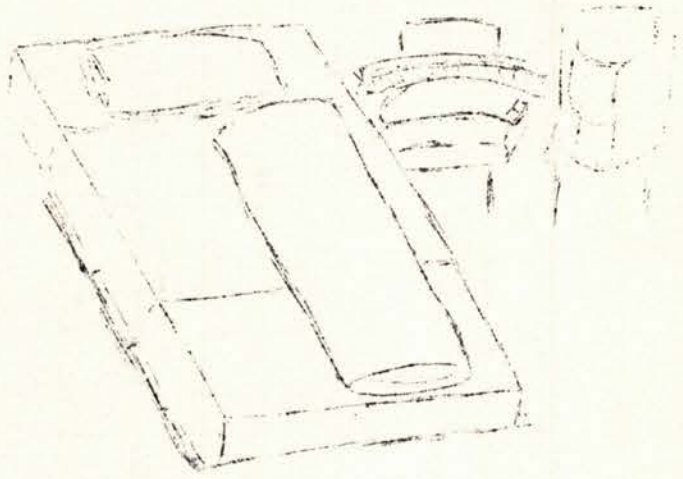
e.g. FRACTURE CASE.

(a) Fracture boards - Bed-length if fractured spine lower $\frac{2}{3}$rds of bed if lower limb.

(b) Bed cradle - lower limb.

(c) Long sandbags with waterproof and linen covers.

(d) 2 - 3 pillows with water-proof and linen covers.



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e.g. HEAD INJURY CASE.

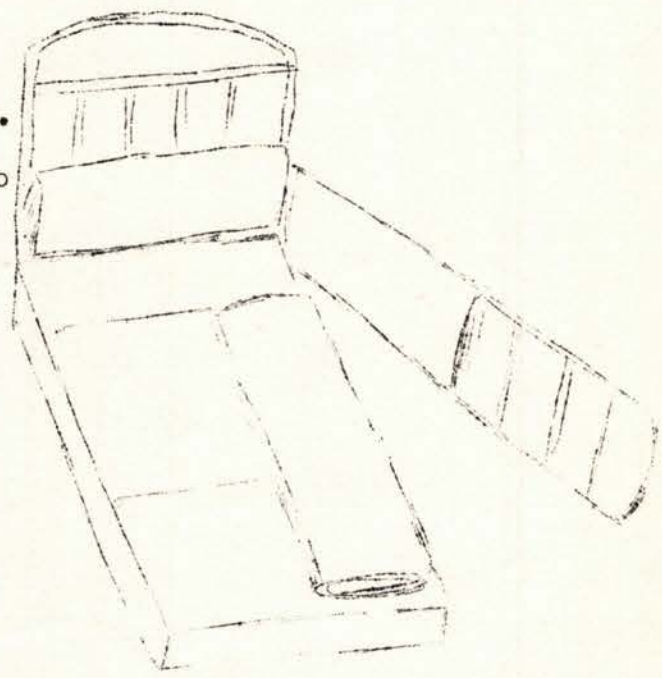
(a) Small waterproof covered pillow in drawsheet to affix to bedhead.

(b) Waterproof strip and drawsheet to protect top portion of bedding.

(c) Torch to examine pupil size and reaction to light.

(d) Head injuries chart.

(e) Stethoscope and sphygmomano-meter (as for any admission).



SHOCKED PATIENT.

(a) Bed blocks to elevate foot of bed.

(b) Sphygmomanometer, stethoscope and chart.

(c) Oxygen apparatus.

UNCONSCIOUS PATIENT.

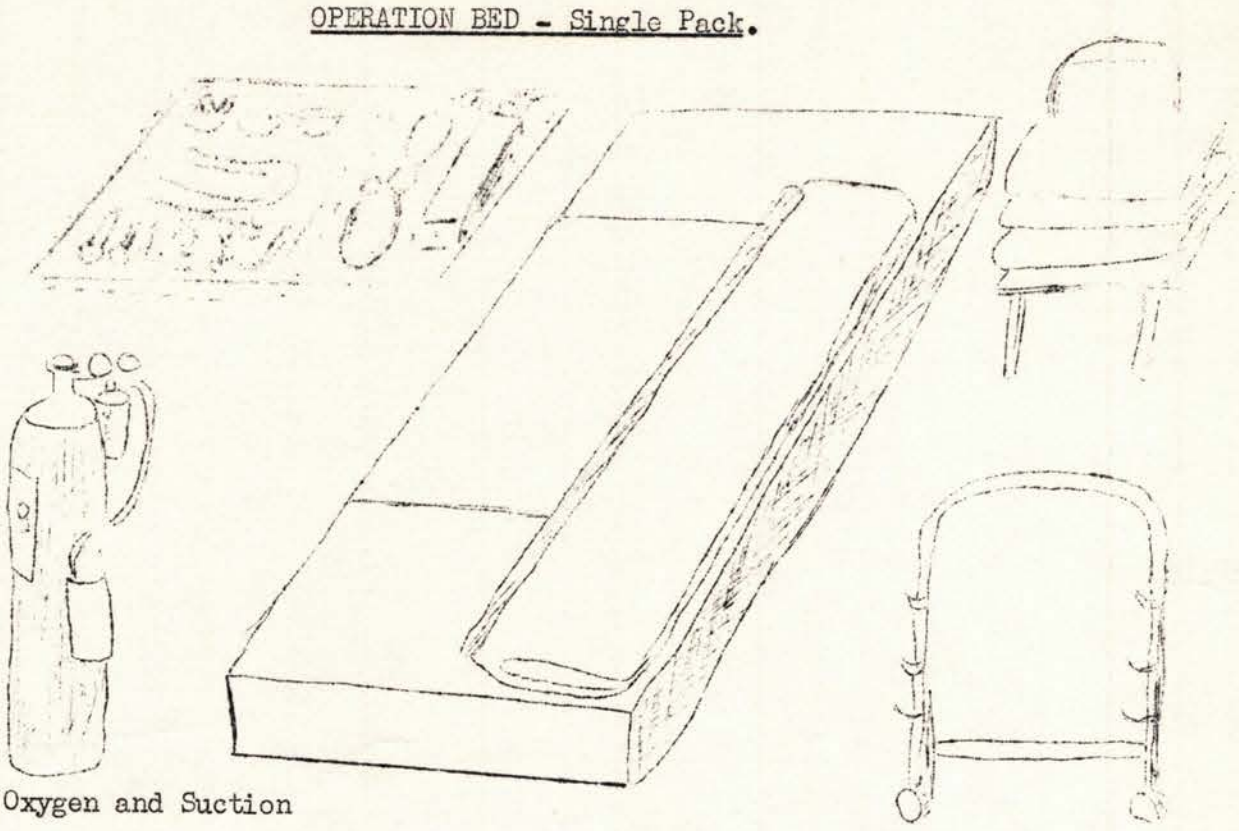
(a) Post-anaesthetic tray.

(b) Suction apparatus.

RESTLESS OR IRRATIONAL PATIENT.

Bedrails required.

OPERATION BED - Single Pack.



Oxygen and Suction

Bed Elevator.

OPERATION BED - double pack.

(e.g. patient after amputation or if for repeated bladder washout).

Additional requirements as above.

POST-ANAESTHETIC TRAY. This is placed beside the operation bed or any patient who is unconscious.

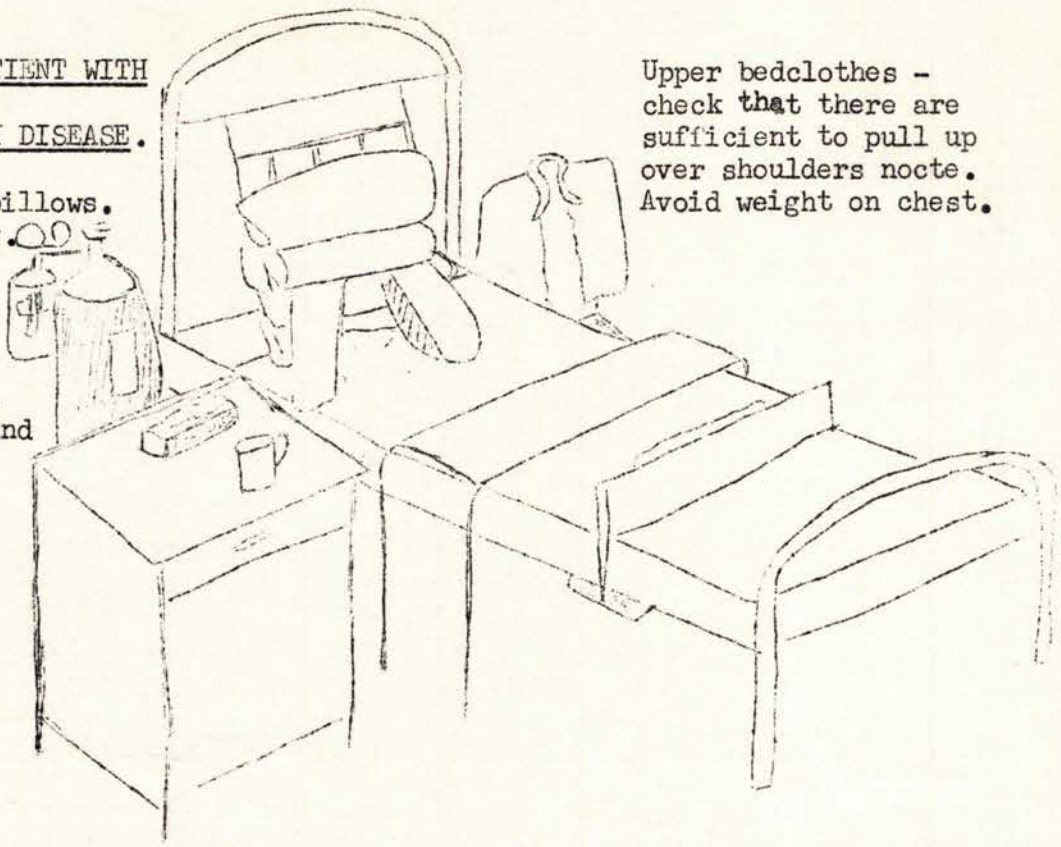
TRAY - Surgically clean. Cover with a small towel.
3 small bowls - GAUZE swabs
water
Receiver for soiled swabs. (with cover or paper bag).
Vomitus bowl.
Kidney bowl for used instruments.
Angled tongue spatula
Airways - assorted sizes
Sponge holding forceps
Artery forceps
Tongue forceps
Mouth gag.

OXYGEN AND SUCTION APPARATUS - always tested and seen to be complete before being brought to bed side.

HOT WATER BOTTLES - these are sometimes used to warm the bed but are removed before patient is put to bed.

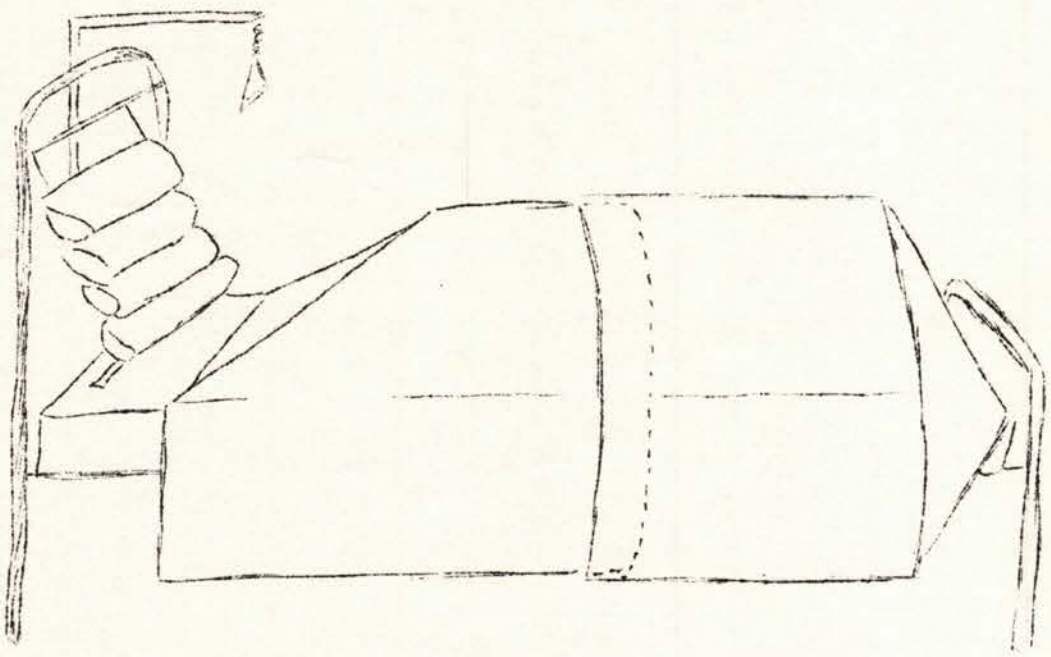
BED FOR PATIENT WITH CARDIAC OR RESPIRATORY DISEASE.

Arm-chair pillows.
Rubber ring.
Cape for shoulders.
Oxygen.
Tissues.
Sputum mug.
Footboard and pillow.
Bell.



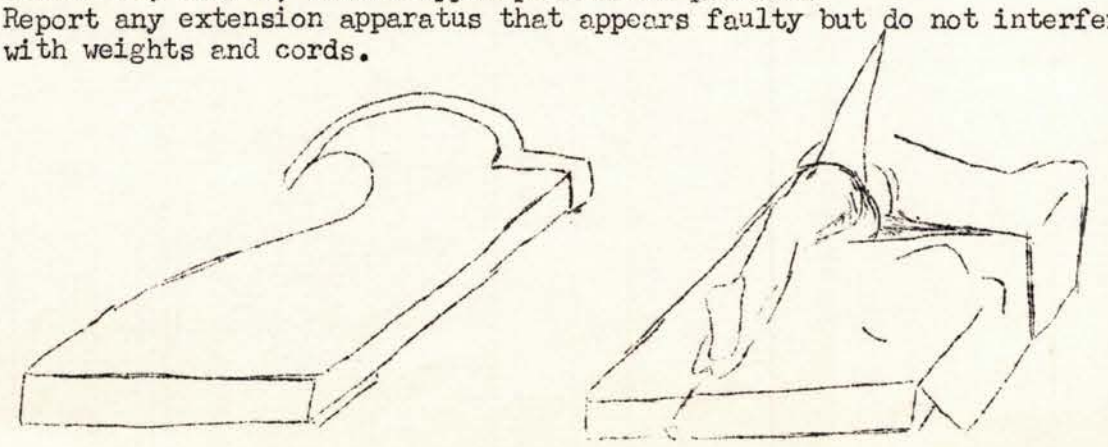
Upper bedclothes - check that there are sufficient to pull up over shoulders nocte. Avoid weight on chest.

DIVIDED BED MADE UP WITH CRADLE IN SITU.



FRACTURE OF LOWER LIMB.

Method of placing upper sheet and blanket.
Quilt, lower portion of bed, folded as for divided bed.
Drawsheet, folded, covers upper portion of patient.
Report any extension apparatus that appears faulty but do not interfere with weights and cords.



LECTURE 29.

POSITIONS USED IN NURSING.

OBJECTIVES:- I. To make the patient comfortable according to the needs of the specific case.
2. To place the patient in the desired position with the minimum of strain to the patient and the nurse.
3. By correct positioning to :-
a) avoid the patient developing backache
footdrop
venous thrombosis
respiratory distress.
b) enable examinations and treatment to be carried out with ease and avoidance of exposure of patient

(Refer to Doherty, Sirl & Ring Chapter II, "Bedside Nursing" by J.Darwin, Chapt. 5, Harmer & Henderson Chapt. I5.)

RECUMBENT POSITION.
A position of rest - the patient is placed flat on the back with a small pillow under the head. The weight of the bedclothes on the feet may be relieved by the use of a pillow and footboard, or a small cradle.
A folded drawsheet is sometimes used to support the lumbar curve.
The elbows may show signs of friction if patient nursed in this position for some time. The sacrum and heels are examined for signs of pressure.
Uses Some acutely ill patients where it is important to save exertion and rest heart.
2. Conscious post-operative cases for first few hours post-operatively.
3. Sponging the patient. Physical examination of the patient.

Semi-recumbent position - position of comfort when no dyspnoea.present. Two - Three pillows support head and shoulders.

FOWLER'S POSITION.
Devised by a surgeon named Fowler. The patient sits in an upright positio the head, back and arms are well supported with pillows. A waterproof protected rubber ring,or an air cushion, is placed under the buttocks. An adjustable, padded footboard helps maintain patient in position or a pillow may be placed in a drawsheet and attached to sides of the bed. A pillow is NOT placed under the knees because of the danger of venous thrombosis. A pillow is sometimes placed on overbed table - to lean on. The sacrum and heels are examined for signs of pressure and position adjusted to relieve same periodically.
Uses I. To facilitate drainage after some abdominal operations, e.g., cases of peritonitis.(Inflammation of the peritoneum)
2. To assist patients with orthopnoea - difficulty in breathing unless sitting upright.

Semi-Fowler's position (modified Fowler's).
The backrest is usually extended and three - five pillows support back and head. Less difficult to alter patient's position from side to side than when in full Fowler's. Rubber ring, footboard, pillows for arms are used as indicated. An overbed grip, when permitted,enables patient to alter position from time to time. Sacral area and heels examined for pressure, hips, and ankles also when nursed from side to side.
Uses I. Most commonly used position for medical and surgical cases. The patient can see around him and take food and fluid with ease. If correctly positioned the patient can expand the lungs fully as the abdominal organs tend to fall away from diaphragm.

LATERAL POSITION.
The natural sleeping position. The patient lies on his side with the knees flexed. The back may be supported with pillows in the case of a helpless patient. A small,soft pillow is sometimes placed between knees and ankles or to prevent upper arm hindering chest expansion.
The hips, elbows, ankles are examined for signs of pressure.
Uses I. Settling a patient for sleep when there is no dyspnoea.
2. To provide variety of position in prevention of pressure sores.

Left Lateral Position.
The patient lies on his left side with the buttocks drawn well over to the edge of the bed and with the legs flexed.

POSITIONS USED IN NURSING.

Uses of left lateral position.

1. Lumbar puncture (Back well arched and level with bed edge)
2. Enemata and bowel washout.
3. Rectal examination.
4. Perineal treatments

PRONE POSITION.

The patient lies with back uppermost- the head turned slightly to one side and resting on a low pillow. The feet are supported on small pillows. A footboard, or small cradle, may be used to support weight of bedclothes over feet. The arms rest beside head or at sides.

Uses. 1. Following operations or burns to the back.
2. Temporary position to relieve pressure on the back in prevention of pressure sores. Used also when exposing a pressure sore to sunlight.

SIM'S POSITION.

The patient lies in a semi-prone position on left side. The left arm is placed behind patient and the left leg is extended. The right, (upper), arm and leg are flexed. The pillow is placed towards left side of bed and patient lies obliquely across bed so that buttocks are towards the right side.

Uses. Gynaecological examination when instruments are used.

Modified Sim's Position

The patient is not placed obliquely across bed but lies semi prone and without a pillow under the head. A firm pillow may be used to support upper arm and prevent patient falling forward. The patient may be placed on either right or left side.

Uses. 1. Unconscious patient - to prevent the inhalation of vomitus,
- to keep tongue forward,
- to detect bleeding in tonsillectomy cases.

2. To provide variety of position in prevention of pressure sores (A pillow would be placed under the head and support given to upper arm and/or leg).

DORSAL POSITION.

The patient lies flat on the back with a small pillow under the head. The legs are flexed and abducted, the soles of the feet are flat on bed. The arms rest at sides.

Uses. 1. Gynaecological manual examination.
2. Catheterization of female patients.
3. Enemata when patient unable to turn on side or has a pan in situ.
4. Vaginal douche, perineal toilet and washdown - patient usually has two pillows.

SHOCK POSITION.

The patient is nursed flat either with no pillow, or a very flat pillow. The foot of the bed may be elevated if blood pressure low or falling. This position is used for patients who are haemorrhaging - other than cerebral haemorrhages.

DRAPING OF PATIENT FOR MEDICAL EXAMINATION.

The area to be examined should be freely accessible to the doctor. The upper bedclothes are usually folded to foot of bed. The patient is draped with two draw sheets - the bottom drawsheet usually overlapps the upper by about 6 inches in the region of iliac crests.

Other requirements when preparing a patient for examination include:-

Explanation to the patient.
Privacy.
Provision of equipment doctor will need.
Correct placement of extension light if required.
Emptying of patient's bladder.
The nurse remains with doctor during pelvic examination of female patients.

BASIC PRINCIPLES OF NURSING CARE

These basic principles are applicable to all nursing procedures.
The nurse endeavours to meet the patient's need for:-

(a) Privacy.
(b) Explanation.
(c) Re-assurance.
(d) Conservation of strength.
(e) Freedom from pain.
(f) General comfort.
(g) Safety.

I. PRIVACY.

The patient is adequately screened before procedures commence. Blinds are drawn as necessary. When the bedclothes are turned back, or the bed stripped, the patient is draped with a procedure blanket or drawsheet. Unnecessary exposure is avoided.

2. EXPLANATION.

Before commencing any procedure the nurse explains what is to take place and uses words the patient can understand. She explains the patient's role in the procedure p.r.n. In some cases an interpreter is required.

3. RE-ASSURANCE.

Many patients are understandably apprehensive before a procedure is carried out, especially if unaccustomed to hospital.
The nurse, by her manner, expression, tone of voice, and by words, endeavours to give the patient re-assurance. She avoids being untruthful, e.g. telling a child "It won't hurt" when it possibly will, but she helps the child to show fortitude if some pain unavoidable.
The nurse should beware of giving glib re-assurance without adequate explanation - e.g. "Don't worry. You'll be alright". Most of us are afraid of the unknown.

4. CONSERVATION OF STRENGTH.

Many patients who are sick, or who are recovering from an illness, tire very quickly. To avoid this the nurse assembles all necessary equipment at the bedside before carrying out a procedure. The patient is positioned so that tenseness and pain are minimised.
Adequate assistance is obtained when required.
Patients who are being encouraged to develop independence are observed for signs of tiring. The steps towards independence are graded according to ability.

5. FREEDOM FROM PAIN.

Pain can frequently be avoided if the nurse plans the procedure in advance. She chooses equipment of suitable size, and checks the strength and the temperature of the lotions used.
The patient is encouraged to relax by gentle positioning and the nurse checks that painful areas are adequately supported. Gentleness, deftness and the provision of a good light by which to work are also aids in preventing pain. In some cases an analgesic is required before treatment is carried out.

6. GENERAL COMFORT.

The main factor in general comfort of the patient is <u>anticipation</u> of the <u>individual</u> patient's <u>specific</u> needs, e.g. for explanation, re-assurance, relief of pain. Emptying of bladder.
Doors and windows are closed before procedures, p.r.n. so that draughts are eliminated. Care is taken that extension lights, if used, do not shine directly into patient's eyes. The patient is seen to be warm, dry, and comfortable during and after a procedure. All requirements, e.g. bell, book, glasses, drinks, are left within patient's reach when treatment is completed.

BASIC PRINCIPLES OF NURSING CARE.

7. SAFETY.

Precautions are taken to prevent the following:-

Burns - from hot water bottles, lotions, lamps, baths, plastines.

Infection - from faulty dressing technique. Cross-infection, or nurse failing to report sore throat.

Injury from falls - e.g. failure to put up side rails of a cot or bed, spillage on the floor causing slipping, lack of assistance in bathing, too rapidly getting a patient from bed when he/she is weak or on hypotensive drugs.

Wrong medication

Inaccurate observation and reporting, or failure to observe or report.

Nurse's knowledge of a procedure is incomplete and she fails to ask for advice, assistance or supervision.

Wrong identification of patient. Children, operation cases, unconscious patients should have body labels attached. Patient's name is attached to bed. Denture containers, patient's medicines labelled p.r.n.

LECTURE NO. 3I.

CARE OF THE PATIENT'S HAIR.

OBJECTIVES:- I. To contribute to the patient's cleanliness and comfort by attention to the hair.
2. To observe the condition of the scalp and hair.
3. To report and treat abnormalities, e.g., pediculosis.

(Refer to Doherty, Sirl & Ring Chapter 8. Illustrations P.359 & 36I Harmer & Henderson and P. I57 & I59 of Handbook for Nursing Aides).

DAILY CARE OF THE HAIR.

After the daily sponge the hair is combed and neatly arranged. It is attended to P.R.N. throughout the day, e.g., when preparing the patient for meals. Brushing the hair improves the circulation of the scalp and the condition of the hair. Long hair is usually best plaited. Interest shown by the nursing staff in arranging the hair of female patients in an attractive way often boosts the patient's morale. When necessary the nurse washes the patient's brush and comb using soap, detergent or a little borax.
The hair is not cut unless permission is given by the patient, the patient's relatives, or the sister-in-charge - depending on the case.

WASHING THE HAIR.

Sister's permission is necessary.
Choose a fine, warm day, if possible, when the ward is not too busy.
The hair may be washed:-

a) whilst bathing the patient,
b) with the patient sitting before the bathroom wash-basin,
c) with the patient sitting out of bed before a small, low table,
d) whilst the patient is in bed - the prone or recumbent position may be used or the patient leans over a bowl on the overbed table.

Requirements for washing the hair in bed.

Top shelf of trolley	I - 2 large bowls
	I - 2 large jugs of warm water.
	I small jug for pouring water over head.
	Soap on a dish or shampoo - bottle or bowl.
	Face washer to protect patient's eyes.
	Brush and comb.
	2 wool swabs - for ears if desired.
Bottom shelf	2 bath towels and safety pin.
	Waterproof cape.
	Waterproof sheet and drawsheet.
	Bucket with lid - for used water.
	Newspapers to place under bucket and protect floor.
	Hair dryer if available.

Method. Explanation to the patient and gain her co-operation.
Ensure privacy and freedom from draughts.
Obtain assistance as necessary.
Arrange equipment for ease of working.
Position patient.

Positions:-

I. If the patient is able to sit up and lean over the bowl on the over-bed table she is often more comfortable sitting on a flat pillow.
The patient's gown is removed, or rolled down, and the waterproof cape and towel placed in position. Pillows, or procedure blanket, protect lower portion of back from chilling.
The waterproof sheet and drawsheet are so arranged as to protect the bedding from spillage.

2. If the hair is to be washed with the patient either prone or recumbent the following procedures may be adopted:-
   a) The overbed table is removed. A chair is placed at the foot of the bed. The mattress is pulled down to leave a space for the bowl on the wire mattress
   b) The backrest may be removed and the bowl placed on a stool at bed head.

CARE OF THE PATIENT'S HAIR.

Recumbent position - a waterproof pillow may be placed underthe patient's shoulders. An assistant supports the patient's neck as it is very tiring for the patient to hold the head in this position.
Prone position - A small waterproof pillow may be placed under the patient's chest.
The patient has cape and towel adjusted and is given ear plugs of cotton wool and a face washer to protect eyes. The nurse checks that the waterproof sheet is suitably placed.
After testing the temperature of the water the nurse dampens the patient's hair and gently massages into the patient's scalp the soap or shampoo.
The lather is rinsed off with clean water from the small jug.
Whilst the bowl is being emptied into the adjacent bucket the second bowl may be placed under the hair to catch the drips.
After the hair has been thoroughly rinsed the nurse squeezes out as much water as possible and then wraps the head in a towel- turban fashion.
The bed is re-adjusted and the patient made comfortable with bed garments replaced. The hair is dried by rubbing with a dry towel or by the use of a hair dryer. It may be possible to place the patient in a sunny position. When dry the hair is dressed in a suitable style.
The nurse washes and sterilizes, or disinfects, equipment used and replaces same in correct area.

TREATMENT OF PEDICULOSIS. ✓

(Refer to Page I49 & I50 Harmer & Henderson. Illustration P. I48).

3 types of lice may infest the human body.

1. Pediculi capitis - head lice.
2. Pediculi corporis - body lice.
3. Pediculi pubis - found in pubic hair and, more rarely, axillae

Pediculi corporis and pubis are not common is this country. Infestation with these parasites is more likely where there is overcrowding of the population and poor hygiene. Body lice are seen as grey specks along the seams of clothing. Always report any marks of scratching on patient's body. Treatment is with D.D.T. spray and improving the general cleanliness of the patient - shaving when indicated and bathing the patient. Infested clothing is either boiled, disinfected, or destroyed.

Pediculosis capitis. This condition is occasionally seen - more particularly in children's wards. Every child admission has the head inspected to detect if lice are present. Especially examine behind the ears for nits or evidence of scratching.
feeding by lice

Requirements for treating pediculosis capitis.

Top shelf of trolley	Medium sized bowl for swabs. Medium sized bowl of disinfectant for used swabs. Small bowl of head lotion.(Lorexane) Small bowl of acetic acid 2%. Kidney dish containing plain & fine toothed combs. Jar of vaseline and spatula.
Bottom shelf	Gown and cap for nurse. Shoulder cape, drawsheet and safety pin. Bucket with lid containing disinfectant for used linen.

If more than one head is to be treated the combs are placed in disinfecant, e.g., chlorhexidine I - 2000, when not in use. A kidney bowl containing water to rinse combs is placed on trolley.

LECTURE NO. 3I cont:-

CARE OF THE PATIENT'S HAIR.

The head lotion most commonly used is LOREXANE which is dispensed in a number of different ways.

I. Lorexane concentrate - dilute I - 4 before use.)
) LOTIONS.
2. Lorexane Head Lotion - requires no dilution.)

3. Lorexane cream. - Massage well into the hair - best if hair is washed first.

4. Lorexane No.3 - After thoroughly wetting the hair rub in about 3 inches of Lorexane No.3 and work up to a lather. Rinse in water, apply more Lorexane and lather again. Finally rinse in water and dry.

As the eggs hatch in 8 - I0 days it may be necessary to repeat the treatment one week later. Very frequently one treatment is sufficient.

Method of performing a head toilet. ✓

Explain tactfully to patient why treatment is being given.
Ensure privacy. An ambulatory patient may be taken to the bathroom.
Place a sheet, or newspapers, on the floor and on this place a chair.
After assembling the requirements the nurse dons a gown and protects her own hair with a cap or a triangular bandage.
If the patient is in bed he/she is placed in semi-Fowler's position and the shoulders are draped with the waterproof cape. Over this the draw-sheet is pinned in position so that the bedclothes are covered. Avoid folds in the material.
Remove knots from the hair using the plain comb lightly smeared with vaseline to entrap pediculi.
Lightly smear fine toothed comb with vaseline and systemmatically comb sections of hair until the whole head has been combed. Pediculi are picked up with a swab and placed immediately into bowl of disinfectant.
The areas infested with nits are swabbed with acetic acid 2%.
Acetic acid, (or weak vinegar), softens the chitin by which the nits are attached to the hair. (Chitin is pronounced ki'tin).
Working systemmatically across the head apply Lorexane lotion until all the hair had been treated. Arrange hair in a suitable style.
At completion of the treatment the used linen is immersed in the bucket of disinfectant and left for one hour before being sent to the laundry.
Alternatively the linen may be placed in a large paper bag and sterilized in the high pressure steam sterilizer taking care not to block the steam inlet or the air outlet. In a private home very hot water may be poured over the linen.
The monelmetal ware is sterilized and the combs and cape disinfected.
The nurse washes her hands and records the result of the head toilet.
A week later the hair is washed, if possible, and more Lorexane is applied if necessary. With the patient screened the hair is inspected daily to check that there are no live pediculi.

Please look up and define the following word:-

Pediculosis Infestation with lice.

Pediculus The louse, a parasite infesting the hair and skin.

Pediculi

Pediculous

LECTURE NO.32

CARE OF THE PATIENT'S MOUTH.

OBJECTIVES:- I. To cleanse and refresh the patient's mouth:-
a) by providing facilities for the patient to clean his teeth when he is able to do so.
b) by regular performance of a mouth toilet when indicated.
2. To inspect the condition of the mouth and the hydration of the patient.
3. To prevent the local and general complications which can result from a neglected mouth.

(Refer to Doherty, Sirl & Ring Chapter 8, Harmer & Henderson Chapter I2 & illustrations P.348,9 & 350. "Scientific Principles of Nursing" by McClain & Gragg P I52 - I58.)

I. AMBULATORY PATIENTS are encouraged to clean teeth in the bathroom. Some cases require assistance from the nurse. Those who are only out of bed for a short time in the day need to be provided with facilities on waking and before settling for the night.

2. BEDFAST PATIENTS a) patients able to clean own teeth,
b) patients requiring mouth toilets.

a) The patient who is able to attend to his own teeth is provided with:- Mug of water, or mouth rinse, e.g. glycoline I - 8.
Receptacle for return of fluid.
Mug for dentures - two-thirds full of water.- P.R.N.
The nurse ensures that the patient has privacy and that he is suitably positioned. The patient is draped with a bath towel and tooth brush and paste are placed in readiness. The nurse assists when necessary.
Dentures - these are cleaned P.R.N. in the bathroom.
They are always moistened before insertion and are handed to the patient in a convenient manner for replacement.
If the patient has no tooth paste, or powder, the dentures may be cleaned with swabs using kitchen salt. Rinse well.
Clean only one set of dentures at a time. Care must be taken not to drop, mix, or lose patient's teeth.
Sometimes patients prefer not to wear their dentures. In this case they are cleaned and placed in a small amount of glycoline I - 8 in a labelled mug. The mug is placed safely in the locker.
Report immediately any dentures which are cracked, or broken or missing.
Patients who are able to clean their own teeth should be given facilities to do so on waking, after each meal if desired, and before settling for the night.

b) Patients requiring mouth toilets include:-
1. Unconscious or helpless patients.
2. Patients on "nil orally".
3. Patients being fed per tube.
4. Some patients with local injuries or operations on mouth.
5. Patients with sordes or with local infections of mouth.
6. Feverish patients.

In some cases a mouth toilet is ordered **prophylactically**, i.e., as a preventive measure to keep the mouth clean. Swabbing out with a pleasant tasting mouth wash such as listerine or glycoline, I - 8 will usually be sufficient. This treatment needs to be carried out at regular intervals, e.g. 2 - 4 hourly. The objective is to remove any food particles, clean the dentures, moisten the mouth and note its condition. If permitted, the patient is given frequent sips of water to help keep the mouth moist. Any milk drinks should be followed with a mouthful of water. Occasionally chewing gum is given to stimulate the flow of saliva or the patient sucks barley sugar or acid drops.

LECTURE NO. 32. CARE OF THE PATIENT'S MOUTH. Page 14.

If the mouth is not kept clean there is a tendency for sordes to develop. Sordes consist of dried mucus, cast off epithelial cells, food particles and bacteria.
Sordes are particularly likely to occur in cases which are feverish or who are having nothing by mouth.
Solutions of sodium bicarbonate and hydrogen peroxide soften the sordes and facilitate their removal.
Glycerine, or glycerine and lemon, may be painted on the tongue to help keep same moist.
If the lips are dry, or cracked, lanoline is usually applied on a small gauze swab.

REQUIREMENTS FOR A MOUTH TOILET TRAY - Surgically clean.
(A sterile tray is used when required for a baby or a patient who has had an operation on the mouth).

4 small bowls - I for each of the following:-
2. Sod. bicarbonate $\frac{1}{4}$ teaspoon to 60 ml water
   Hydrogen peroxide I - 4
1. Glycoline, or listerine, I - 8
3. Glycerine, or glycerine and lemon - very small amount.

Medium sized bowl containing dressed swab sticks, wool swabs and small squares of gauze.

Small bowl for ~~disinfectant e.g. chlorhexidine I - 2000 (blue) or~~ dettol I - 40.
or
a small paper bag may be placed in the bowl to receive the used swabs

Tube of lanoline or similar emollient cream.

Spatula to retract cheeks or depress tongue P.R.N.

Cover tray with clean surgical towel.

The nurse also takes to the bedside :-

Mug of water for dentures when required.
Mouth wash and receiver for used fluid.
Torch to inspect mouth when necessary.

In the following cases swab sticks are not used:-
Unconscious patients, or semi-conscious patients,
Unco-operative patients.
A thin piece of cotton wool is securely clamped in a pair of artery forceps and wrapped around same so that the points are covered.
This is dipped in lotion and used to clean the mouth. To remove the used swab a pair of dissecting forceps are used.
On very rare occasions a mouth gag is gently inserted for a brief time when difficulty is experienced in opening the mouth.
The dressed artery forceps are useful for cleaning a heavily coated tongue as well as avoiding the danger of an unco-operative patient possibly swallowing, or inhaling, the cotton wool from the swab stick.
When indicated add to the mouth toilet tray:-
Kidney bowl containing - artery forceps
dissecting forceps
mouth gag.

LECTURE NO. 32. CARE OF THE PATIENT'S MOUTH.

Method of performing a mouth toilet.

The tray is brought to the bedside and the proposed treatment explained to the patient when necessary.
Privacy is ensured and the patient is suitably positioned, e.g., semi-Fowler's position. A towel is placed under the patient's chin.
The nurse washes her hands.
She requests patient to place dentures in mug or she removes same.
Using dressed swab sticks the mouth is cleansed with each solution in turn. The nurse gently swabs around the gums, teeth, (front and back), cheeks and tongue. Care is taken not to put pressure on the back of the tongue as this may cause retching.
Each swab is dipped only once into the lotion and after use is discarded into the bowl of disinfectant or a paper bag.
The mouth is inspected P.R.N. using the torch and spatula.
If the patient can manage to do so he rinses the mouth with a refreshing mouth lotion.
Glycerine is smeared on the tongue. Lanoline is applied to dry lips using a small piece of gauze.
The dentures are cleaned in the bathroom and replaced.
The nurse washes her hands and sees that the patient is comfortable.
She records the time of treatment and the condition of the mouth as necessary.

Small individual trays are to be preferred to a community tray. Such a tray can remain on the locker and facilitate frequent attention to the mouth. It is replenished after use and kept tidy. When a community tray is in use the nurse needs to exercise great care not to contaminate same, e.g. after removing the patient's dentures she must wash her hands before handling contents of tray. Mouth toilet trays should be sterilized at least once a day - more frequently if a community tray is used.

COMPLICATIONS OF AN ILL-KEPT MOUTH.

Patients who require mouth toilets are frequently in a debilitated state and with a poor resistance to infections. If cleanliness of the mouth is neglected the following may occur:-

1. Anorexia and nausea (lack of appetite) due to unpleasant taste.
2. Dental decay and inflammation of the gums.
3. Stomatitis - inflammation of the mouth
4. Gastro-intestinal upsets, due to spreading of infection down alimentary canal or the swallowing of infected material.
5. Otitis media - inflammation of the middle ear due to spread of infection via the Eustachian tube.
6. Parotitis - inflammation of the parotid (salivary) gland due to spread of infection along the duct
7. Septic pneumonia - inflammation of the lungs due to spread of infection to the respiratory tract.

BOWEL TREATMENTS - ENEMATA. SUPPOSITORIES.

OBJECTIVES:- I. To assist the patient to retain the enema or suppository when this is indicated.
2. To assist the patient to defaecate with the minimum of discomfort when evacuation of the bowels is the purpose of treatment.

(Refer to Doherty, Sirl & Ring Chapter I4, Harmer & Henderson P. 845-849).

AN ENEMA is a rectal injection of fluid which may be given:-
a) to be retained and absorbed, e.g., some sedative drugs.
b) to be retained for a limited time, e.g.,
barium before a bowel x-ray
Olive or maize oil after anal operations
c) to be retained briefly and then produce evacuation of the bowels
e.g. soap and water enema.

Equipment needed for enema administration varies depending on whether any disposable enema sets are available, the amount to be given and the type of enema. When large amounts of fluid are to be given a douche can is used to hold the fluid and a rectal tube, or large catheter, is used. When only a small amount of fluid is to be given it is given by a funnel, the length of tubing is reduced and the size of the catheter. The size of the catheter also varies according to the age of the patient. Catheters are numbered according to size - the larger the catheter the larger the number. The English gauge is the one most commonly mentioned. The type of catheter used is a Jacque's catheter.

SOAP AND WATER ENEMA (Enema saponis).
Reasons for administration:-
1. To relieve constipation.
2. To relieve flatulence (gas in the intestine).
3. To empty the bowel before, e.g.:-
a) some operations,
b) a bowel washout,
c) administration of rectal drugs
d) some x-rays and examinations of bowel.

Mode of action. The fluid softens and breaks up the faecal mass. By distending the bowel wall nerve endings are stimulated and peristalsis is increased. The soap in the water is irritating to the bowel mucous membrane and this aids evacuation. If no soap solution for enemata is available a cake of Velvet soap is grated and dissolved in I litre boil H_2O. This is labelled "Enema Soap" and stored in a container with a lid. Other soaps than Velvet may contain ingredients harmfully irritating to bowel lining.

Requirements Hand-tray. Surgically clean equipment.
1. 2 ~~litre~~ pints or 1 litre jug of solution (I tablespoon of soap solution to each 0.5 to 1 litre of water - well dissolved
Temperature 38 - 40°C.)
2. Large kidney dish containing rubber tubing (approx. I00 cm long)
glass connection
rectal tube or catheter suitable to age of patient, e.g. No.I2 for an adult.
clamp.
3. Douche can.
4. Small bowl containing vaseline on a piece of folded gauze or paper.
The nurse checks that the the rubber tubing fits the can and connection securely, and that the catheter fits the connection.
A clean cover is placed over tray.

The nurse will also need to assemble at the bedside additional requirements :-
a warmed bedpan and cover
toilet paper
procedure blanket
protection for the bed if waterproof and drawsheet not in situ. place.

The hand-tray may be placed on a trolley - the additional requirements are arranged on the bottom shelf.

LECTURE NO 34 Cont:-

BOWEL TREATMENTS - ENEMATA. SUPPOSITORIES.

Method of giving a soap and water enema.

Preparation of the patient. Explanation of procedure and gain patient's co-operation.
Screen the bed and close adjacent doors and windows. The blinds are drawn when necessary but check that there is sufficient light.
The patient is given a bed pan or urinal so that bladder is emptied. He is then placed in left lateral position with buttocks towards right hand side of bed.
The nurse adapts to the needs of the case, e.g. the enema may need to be given with patient in the dorsal position and with a pan in situ.
If it is likely that the patient will have difficulty in retaining the enema a small mackintosh strip and drawsheet may be placed under the buttocks. In some cases assistance will be necessary.
The bedclothes are neatly turned down about mid thigh level and the patient is covered with a procedure blanket, or drawsheet, so that exposure is avoided.

The Procedure. After assembling the equipment the nurse lubricates the catheter approximately 8 - 10 cms taking care not to block the opening. She tests the temperature of the solution and removes any froth after pouring the solution into the douche can. Some of the solution is allowed to run through the tubing to expel the air and then the clamp is tightened.
The catheter is inserted into the rectum approx. 8 - 10 cms. The patient is advised to relax and breathe deeply. With the can raised about 30 - 45 cms (12") above the buttocks the fluid is allowed to run into the bowel slowly. The can may be attached to an intravenous infusion stand if desired. When the last of the solution reaches the glass connection, or the patient feels he cannot tolerate any more, clamp the tubing. The catheter is gently withdrawn through toilet paper and placed in the kidney dish.
Place the patient in the recumbent position and ask him to try and retain the solution for a few minutes.
The bed pan is inserted and the pillows adjusted to support the patient's back. Toilet paper and bell are placed at hand. The nurse may need to remain with the patient otherwise she clears away the equipment, washes and sterilizes same.
She returns to the patient and attends to his toilet as necessary. The patient is offered facilities to wash hands. The nurse checks that the patient is clean, dry and comfortable with everything he requires within his reach. Remove screens, draw up blinds, open windows.
Check if Sister wishes to see the result of the enema before discarding same. Record the result, e.g., good, fair, poor, or if only faecal fluid returned. Note colour, consistency and abnormalities. State if flatus passed and any comments re patient's condition, e.g., pain or exhaustion.

Quantities of solution for different age groups.
An adult requires about 600 - 1000 ml. (1 pint)
A child of 14 years about 600 ml.
A child of 6 - 10 years about 180 - 240 ml.
A baby usually expels some of the fluid as it is being given but if he does retain it 60 - 120 ml is sufficient.
When small quantities of fluid are to be given a funnel may be used in place of the douche can.

OLIVE OIL ENEMA.
This enema is used to soften hard faeces after the bowels have been confined for several days following an operation on the rectum or vagina. The oil is retained for 30 minutes, if possible. In some cases it is followed by a small soap and water enema.
Requirements:- Similar to that required for a soap and water enema except that a smaller jug and catheter are used (e.g. No 10 catheter). A funnel is used in place of the douche can.
Quantities:- 180 - 240 ml for an adult
120 - 180 ml for a child
30 - 60 ml for an infant.

Stand jug of oil in a bowl of warm water to warm to 37 - 37.8°C.

LECTURE 34 CONT:-

BOWEL TREATMENTS - ENEMATA. SUPPOSITORIES.

Administration of an olive oil enema.
The patient is prepared as for a soap and water enema but in addition the foot of the bed is elevated on blocks, or a bed elevator.
A waterproof strip and drawsheet are placed across the bed, (not just under the buttocks), in case the patient has difficulty in retaining the oil.
The solution is run in slowly so that the bowel is not suddenly distended.
The patient is placed in the recumbent position after the enema.
The bed is left on blocks until the patient is ready to defaecate.
A bell is given to the patient to ring when ready for the pan which should be adjacent to the bed. If there is time the pan can be re-warmed.

SUPPOSITORIES.

A suppository is a cone-shaped preparation of a drug for introduction into the rectum. The suppository melts at body temperature and the drug is liberated. Some suppositories are used to produce evacuation of the bowels, e.g. Durolax, Glycerine suppositories.
Suppositories used for this purpose should be placed well into the rectum and not just beyond the anal sphincter. The patient needs to be carefully instructed that the suppository has to melt before it will be effective and that therefore he is not to expect an immediate bowel action.

Requirements for suppository administration.

Small hand-tray (The tray used for rectal examinations is often used).

Medium sized kidney bowl containing a right hand glove
or
plastic disposable glove
or
finger stall

Kidney bowl for used gloves and swabs.
Small bowl of swabs and gauze.
Small bowl for suppositories.
Lubricant, e.g. vaseline or K.Y.jelly.
Glove powder in a packet or jar.

Procedure. Explanation to the patient. Ensure privacy.
The patient is placed in the left lateral position and the anal region exposed.
The nurse dons the glove and lubricates the suppository and then gently inserts same into the rectum. She notes if the faeces appear very hard and if the rectum is very distended. Sometimes more than one suppository will be required. If the patient has impacted faeces report this to sister as the faeces, in that case, may need to be manually removed.
It is often wisest to lubricate the gloved finger and investigate the state of the rectum before inserting the suppository.
Unless a plastic glove is used the faeces are wiped from the gloved finger with swabs, or toilet paper, before the glove is removed.
A warmed pan is left near the patient or the nurse works in the vicinity so that she will be ready to obtain a pan when required. In some cases the patient is permitted to go to the toilet if it is not necessary to see the result of the suppository administration.
The nurse washes and sterilizes the equipment used. If the tray is kept set up she sees that the contents are replenished.
Used gloves are washed in warm soapy water and sterilized in the high pressure steam sterilizer at 132°C for 5 minutes. They are then dried and powdered before being put away. Gloves used for rectal treatments should be kept separate from those used for other purposes.
The nurse is careful to thoroughly wash her hands after handling equipment contaminated with faeces.
The administration of the suppositories is recorded - also the result of the treatment.

LECTURE NO. 35. APPLICATION OF HEAT

INFRA-RED RAY LAMP. HOT WATER BOTTLES. PLASTINE.

OBJECTIVES:- I. To introduce the student to some of the ways in which applications of heat are used in patient care.
2. To emphasis the precautions which are necessary when applying heat to the body.

(Refer to Doherty, Sirl & Ring Chapter 5 re hot water bottles, and Chapter 42 re plastine. McClain & Gragg, Chapter 22.)

Applications of heat to the body may take the form of general applications or local applications. The heat may be moist or dry.
The reasons for the application of heat vary, e.g.:-
General application, e.g. a hot bath, can add to comfort and be relaxing - especially if taken just before bed time.
Local applications - Dilate the superficial blood vessels and improve the circulation to the part.
Counter irritant effect - congestion in a deep seated organ is relieved by the superficial vaso-dilatation and this helps relieve pain.
Dry heat stimulates the circulation and in addition helps keep the area dry thus aiding healing.

USE OF HOT WATER BAGS.

Because of the misuse of hot water bags in the past some hospitals forbid their use. Hot water bags, if used with caution, can greatly add to the patient's comfort - e.g. to pre-warm a bed, or to relieve pain, e.g. rheumatic pains or dysmenorrhoea. Sister's permission must always be obtained before a hot water bag is used.
Hot water bags are not used for the following cases:-
Patients who are either unconscious
paralysed
irrational
small children or babies.

Very occasionally hot water bags may be necessary in the treatment of babies but then very special precautions are taken that the baby cannot possibly come into contact with the bag. The water is no hotter than 54°C., the stopper faces towards the foot of the cot, the cover completely encloses the bag which is held in position between the mattress and the cot side. The babe's position is checked frequently as it may wriggle out of its wraps and contact the bag.

FILLING OF A HOT WATER BAG.

The bag is examined to see that no area looks perished and that the rubber feels firm.
The cork should be well fitting and carry a washer.
The cover should be large enough to completely enclose bag and be made of blanket material, or flannel, and freshly laundered.
The nurse will also require a jug of hot, but not boiling, water e.g. 90°C.
lotion thermometer,
piece of old linen,
metal funnel if available, (with air vent)
Test the bag for leaks by either filling with air and squeezing to see if air escapes, or by pouring in a little warm water and then squeezing. The warm water also pre-warms the bag. Empty the bag of water or air. The bag is placed flat and holding it by the handle or neck the nurse pours water into it from the jug until it is 3/4 full. Avoid splashing. The use of a funnel is an extra safety precaution .
Pressure from the hand expels any air from the bag. Do not hold bag against chest to do this.
Screw in stopper firmly. Shake out any water from neck of bag and dry same with piece of old linen. Invert bag and examine carefully for leaks. Completely envelope bag in cover.
The bag is placed in the bed two thicknesses of blanket away from the patient. Care is taken that no limb rests on the bag, or the bag on a limb. The bag is removed when cool and refilled if required. If more than one bag is in use these are filled in rotation, e.g. 2 hourly.
In special circumstances Sister may permit a sensible patient to have bag between sheets.

HOT WATER BOTTLES. INFRA-RED RAY LAMP. PLASTINE.

CLEASING AND STORAGE OF HOT WATER BOTTLES.

The used cover is sent to the laundry.
The bag is washed in warm, soapy water, rinsed and dried. Disinfect P.R.N.
The nurse checks that the stopper is securely attached and the washer not worn. The bag is hung up to drain.
After lightly dusting the bag with powder the nurse inflates it with a little air so that the sides are not in contact.
The bag is stored flat in a cool, dark place with a piece of paper towel between each bag in the pile.

INFRA-RED RAY LAMP.

The infra-red lamp consists of a metal element and a reflector. The radiant heat lamp consists of a globe and a reflector. Either may be used, as ordered, to give warmth, relieve pain, and aid healing.

Method of application.
Allow lamp to heat for at least five minutes before application.
Place patient in position so that lamp may be directed straight at area to be treated. Surround area with drapes.
Have the rim of the reflector no closer than 26 inches to patient (65 cm.)
The field of rays is very slightly larger than the area of the reflector.
Do not dent or damage the reflector.
The lamp should not be suspended above the patient as it may drop.
Cover patient's eyes with a towel if treatment is to be on face or chest.
Test heat with back of hand resting on the part to be treated. It should be mildly and pleasantly warm.
Allow IO - 20 minutes for treatment - or as ordered. Skin should only be slightly pink at conclusion of treatment.
Treatment may be ordered T.D.S. or four hourly. Keep treatment to a minimal time when frequent applications are given or when treating buttocks or sacral area,

Precautions.
As with all electrical appliances do not use unless in good working order, wires covered, plug intact, cords not frayed. Test before use on patient.
Do not allow electrical appliances to come into contact with water.
Handle only with dry hands.
If patient has to be left place a bell at hand and give patient a drape to put over part if lamp feels too hot.
Semi-conscious patients, irrational patients or children are not left unattended. The nurse also remains with patients who are paralysed or who have no sensation in the part.

PLASTINE (SOMETIMES CALLED KAOLIN POULTICE OR ANTIPHLOGESTINE.)

Plastine consists of kaolin (clay) to hold the heat, glycerine which is hygroscopic, and other ingredients such as methyl salicilate and peppermint oil. absorbing moisture from the air

Uses. It may be ordered in the treatment of local and superficial inflammations where the skin is not broken, e.g., boils, cellulitis, phlebitis. It relieves the pain and aids in the localisation of pus.
The counter-irritant effect of a plastine is utilized in treatment of pleurisy and pneumonia.

Equipment needed.
Poultice board or newspaper.
Tin of plastine and tin-opener to lever up lid.
Metal spatula in jug of hot water.
Scissors.
Linen cut to size of area to be covered & gauze piece ½ inch smaller.
Piece of waterproof material (plastic) ½" larger than linen piece.
Yellow wool (non-absorbent) ½" larger than plastic.
Bandage, preferably of flannel, or binder and safety pins.
Shoulder straps if application is for the chest wall.
Two warm kidney dishes.

LECTURE NO. 35 cont:-

APPLICATION OF HEAT.

HOT WATER BOTTLES, INFRA-RED RAY LAMP, PLASTINE.

PREPARATION OF THE PLASTINE.

The nurse inspects and estimates the size of the area to be covered.
She cuts linen, gauze, plastic and yellow wool of the required size.
The corners of the linen are trimmed to avoid bulkiness of plastine.
If the plastine is to be applied to the breast a hole is cut for nipple.
Stir plastine and spread on linen with a warm spatula - dip spatula into hot water P.R.N. to facilitate spread. The surface of the linen is evenly covered with plastine about 1/4" thick - thinner towards edges.
Hold plastine against light to examine for even-ness of spread.
Cover plastine with gauze and turn in linen hem neatly leaving no raw edges
Place the plastine in a suitable place to heat, e.g., on newspaper on top of a water sterilizer, or on an inverted saucepan lid over a saucepan of water on gas stove. It may be placed between kidney dishes and put in high pressure steam sterilizer warm from recent use. Common sense should dictate where to heat a plastine depending on facilities available.
A freshly made plastine could be heated in the ward pantry, if sister permits. It would be risking contamination of the pantry to re-heat a used plastine here unless special precautions are taken.
A large plastine could be heated on newspaper on a tin tray on top of a water urn.
While plastine is heating prepare patient for its application - explanation of treatment, draw screens, position patient so that area is accessible.
If a binder is to be used place same in readiness.
The plastine is brought to the bedside in warm cotton wool held in 2 bowls.
Nurse tests the heat of the plastine on inside of her forearm.
A large plastine is rolled from each end into centre.
Apply centre of plastine to centre of skin area and roll out edges slowly.
Place plastic sheet over plastine and then yellow wool.
Fasten in place with binder or bandage. Check that the patient is comfortable
The time of application is recorded.
The nurse cleans all articles used and returns these to correct places.
Be sure the outside of the plastine tin and around lid have been thoroughly wiped free of plastine and check bench area for any traces.
As the glycerine in the plastine is hygroscopic the lid of the tin should be firmly replaced after use, otherwise a film of water forms on the top of the preparation.
The plastine is usually re-heated 4 hourly. A fresh application is made every 24 hours or more frequently if the mixture becomes dry.
Whilst plastine is being re-heated cover skin area with the yellow wool to prevent chilling of the patient.
When the plastine is discontinued the skin is washed and the area is covered with yellow wool and a bandage or binder. The yellow wool is gradually thinned out over a period of 24 hours and then the area is left uncovered.
If the skin looks red and sensitive it may be swabbed with warm olive oil Olive oil is used when removing dried and adherent plastine from the skin.

RE BURNS FROM HOT APPLICATIONS. If a patient sustains a burn from any cause e.g. hot water bottle, infra red lamp, plastine, this is reported immediately to Sister.

Temp 65°C.

LECTURE NO. 36. ADMINISTRATION OF OXYGEN.

OBJECTIVES. I. To assist the student to an understanding of how to administer oxygen by catheter or mask.
2. To emphasise the precautions which must be taken when oxygen is in use.
3. To familiarise the student with the equipment used and how to care for the apparatus.

(Refer to Doherty, Sirl & Ring, Chapter I8. Harmer & Henderson Chap.27. McClain & Gragg, Chapter I8).

Oxygen is a colourless, odourless gas. It comprises 20% of the air.
DANGER OXYGEN SUPPORTS COMBUSTION.

Never use:- a) Oil or grease on oxygen cylinders or connections Oil coming into contact with O_2 under pressure can ignite violently.
b) Naked flames or faulty electric switches when oxygen apparatus in vicinity.

Oxygen Supply.

a) Bulk - piped to area of disposal.
b) Cylinders - black with white top.

The nurse's objectives when administering oxygen are:-

I. Connect equipment correctly and test before use.
2. Explain treatment to the patient and gain his co-operation.
3. To warm and moisten the oxygen by means of a humidifier and to regulate the flow to the correct rate.
4. To return to the patient at regular intervals and observe his condition and the functioning of the apparatus.

INTRA-NASAL OXYGEN. Equipment Required.

Where oxygen is not delivered by pipeline cylinders of O_2 are kept ready set up for immediate use. It is usually one member of staff's responsibility to check these for completeness on each shift of duty.

Oxygen cylinder with flow-meter and humidifier.
Attached to humidifier - length of pressure tubing approx I00 cm long.
To this is attached an intra-nasal catheter by means of a metal or plastic connection. The size of the catheter varies with age of the patient.
A No. 6 catheter is usually used for an adult.

Bag attached to cylinder
Spanner with ends of different size - to tighten screw connections P.R.N.
Adhesive plaster (zinc oxide), and scissors.
A second intra-nasal catheter.
Safety pin.

Warning notice to be placed on bed when oxygen in use.

For non-emergency cases the nurse will also require :-
nasal toilet tray — torch
lubricant, e.g. K.Y. Jelly. — spatula.
small bowl of water

Method of administration.
Test the cylinder before bringing same to the bedside.
Explain the treatment to the patient and relieve any apprehensions.
Screen the patient and perform a nasal toilet as necessary.
Cut 2 - 3 small pieces of adhesive plaster and place in readiness.
Attach the tubing to the pillow by means of the safety pin.
Measure on catheter the distance from tragus of ear to tip of nose.
A tiny piece of adhesive plaster is used to mark distance on catheter.
Lubricate catheter lightly taking care not to block holes.
Adjust flow, e.g., 5 -6 litres a minute - or as ordered. Check flow by bubbling through bowl of water and detect if any blockage of holes.
Notice if catheter has a natural droop and utilize this when inserting.

ADMINISTRATION OF OXYGEN.

Method of administering intra-nasal oxygen.
The catheter is gently inserted in a backward direction along the floor of the nose until the mark on the catheter is reached. The patient is asked to open his mouth and the nurse inspects the position of the catheter the tip of which should just appear at uvula. A torch and spatula may be necessary.
The catheter is strapped to nose, cheek or forehead - out of the way of vision, mouth and hair. Check that there is sufficient slack of tubing to allow free movement of head.
The catheter is changed at least 12 hourly - more frequently if mucous secretion profuse. The fresh catheter is placed in the other nostril unless there is a deviated septum. Nasal toilet before insertion.
The nurse records the time of commencement of oxygen therapy and when catheter changed.

Whilst the patient is on oxygen therapy the nurse returns at regular intervals and checks the following:-

Pulse, respirations and colour, and general condition of patient.
Position of the patient - when possible he is kept sitting up in bed to aid respirations. There should be no weight of blankets on chest - a shoulder wrap may be necessary.
Periodic deep breathing and expectoration of sputum.
Cylinder and humidifier contents. She has a full cylinder for replacement and ready set up for changing over P.R.N.
Bell at hand for patient to summon nurse P.R.N.

Sister is notified immediately of any significant change in patient's condition. Discontinue oxygen gradually if patient has been having same for some days. Nasal toilet as necessary when catheter removed.

Care of equipment after use.
The catheter when removed is withdrawn through a swab and placed in a covered kidney bowl. It should be rinsed through and thoroughly cleaned before the secretions can dry on it. Occasionally it is necessary to soak the catheter in sodi bicarbonate solution or hydrogen peroxide 1-4. All marks of adhesive are removed with e.g. "Zoff". The catheter is sterilized in the high pressure steam sterilizer at 132°C. for 5 minutes.
The nurse replenishes the bag attached to the cylinder.
She checks that the main valve is firmly turned off and releases any O_2 between the main valve and the fine adjustment valve before closing same.
Empty cylinders are clearly labelled.

DISPOSABLE MASKS are sometimes used for oxygen administration - adult or child size masks.
The nurse checks that the mask fits snugly and that there are no kinks in the tubing. These masks are inclined to become moist and need wiping out. The patient can easily remove same. When the patient wishes to have the mask removed, or the oxygen temporarily discontinued, he should be asked to ring for the nurse. Oxygen is an expensive gas and the cylinder should be turned off when not in use. Oxygen leaking from a cylinder can be dangerous.

SUCTION APPARATUS

Suction of oro-pharyngeal secretions may be necessary when nursing cases who have been anaesthetised or who are unconscious for other reasons.

Types of apparatus:- Suction from wall fitments.
Electric sucker.
O_2 administration and suction fitments on one cylinder
Jet Venturi - Oxygen cylinder used for suction
When Jet Venturi suction apparatus is used a second cylinder with oxygen adminstration fitments is required if patient needs oxygen.

Nurses are advised to familiarise themselves with the different types of apparatus whenever opportunity exists.

LECTURE NO. 37 Cont:-

* STERILE PROCEDURES - PERINEAL WASHDOWN AND TOILET.

OBJECTIVES:- I. To assist the student to an understanding of:-
a) when to perform a perineal toilet,
b) when to combine a washdown with a toilet,
c) how to perform these procedures,
d) the importance of observation of blood loss per vaginum.

(Refer to Harmer and Henderson Chapter 32.Illustration P.441 "The Practical Nurse" by Culver-Brownell).

REASONS FOR PERINEAL CARE

I. To cleanse the vulval, perineal and anal region after surgery to these parts.

2. To aid in the prevention of infection by cleansing the area after voiding or defaecation, and by keeping a perineal suture line as dry as possible.

A perineal washdown consists of pouring warm, mildly antiseptic lotion over the vulval, perineal and anal regions. The area is then dried with sterile swabs and covered with a sterile pad, i.e. a toilet is then performed

A perineal toilet consists of the swabbing down of the vulval, perineal and anal regions with moist swabs, drying same and applying a perineal pad. The wasdown is omitted when it is especially necessary to keep perineal sutures dry. Unless special precautions are taken after a washdown there is a tendency for some of the fluid ~~to~~ collect in the vagina. When the patient sits up this spills over the suture line and the pad becomes wet.

REQUIREMENTS FOR A PERINEAL WASHDOWN.
A trolley is set with aseptic precautions. When necessary this can be adapted to the use of a handtray.

Bottom shelf - A recently sterilized bed-pan covered with a sterile towel
Kidney dish for soiled swabs) Covers for same
Kidney dish for used instruments) adjacent.
T-binder. Flannelette perineal pad to hold sterile pad in place
Procedure blanket (if same not at bedside).
Kidney dish containing a pair of dissecting forceps & cover e.g. paper bag. This is for removal of soiled pad.

Top shelf - sterile equipment.

Large bowl containing perineal pads,) placed in bowl
swabs) in order of
2 surgical towels) use.
Small bowl of aqueous antiseptic e.g. chlorhexidine I-2000
2 litre jug of solution 37 - 38°C.
Kidney dish,or covered instrument tray,with 2 pairs forceps

Suitable lotions for washdown.
Aqueous chlorhexidine I - 2000
Dettol I - I60 (Pleasantly deodorant).
Normal saline - sterile.
Sterile water.
Many hospitals permit the use of warm tap water for most cases.
Ascertain sisters orders regarding this.
Some gynaecological cases are permitted to shower,whilst some anal cases are ordered a bath. In these cases the washdown is omitted on that occasion and the area is dried with sterile swabs.

FREQUENCY OF TOILETS, or toilet combined with a washdown.
Sister orders the frequency of the toilets taking into consideration the type of operation, the number of days post-operatvely, or degree of loss per vaginum in operation and non-operation cases.
e.g. perineal care may be ordered each time the patient voids or uses bowels, or,if catheter in situ and bowels confined,the care is 4 hourly.
or
perineal care may be ordered three times a day and once by night staff.
In gynaecological wards a tray for perineal care is often kept ready for immediate use to save delay once patient has used a pan.

LECTURE NO. 37 Cont:-

STERILE PROCEDURES - PERINEAL WASHDOWN AND TOILET.

METHOD OF PERFORMING A WASHDOWN.

Ensure privacy and explain procedure to patient.
Provide patient with pan to void and/or defaecate unless already on one.
After use replace pan with the one from bottom of trolley.
The patient is arranged in the dorsal position but with two pillows under head. The bedclothes are divided at the pelvic region.
The nurse washes her hands. She returns to trolley and collects jug.
Warm tap water is used to dilute the antiseptic already in jug or tap water alone is collected. The nurse tests the temperature of the lotion by pouring some on the inner aspect of her forearm whilst at the sink.
The patient is draped with a towel over each thigh.
The nurse pours a little of the lotion on the thigh of the patient, near vulva, to let her know the temperature and then pours the solution over the vulva. 500 ml of solution is usually sufficient.
Using forceps, the points of which are well protected with swabs, the nurse dries the vulva. She swabs in a downward movement towards the anus, left right and centre. Each swab is used only once and is discarded into the kidney bowl - not into bedpan. Sit patient forward to empty vagina.
The patient turns onto her left side and the pan is removed.
The perineal region is gently dried with swabs and then the anal region.
Using forceps the perineal pad is placed in position. This is covered with a flannelette pad and the T-binder.
The patient is re-positioned and seen to be warm, dry and comfortable.

Removal of soiled perineal pads.
When a patient who has a perineal pad in situ wishes to use a bed pan the nurse takes a warmed pan to the bedside, and, in addition she takes a pair of forceps in a covered kidney bowl. The pad is placed in the bowl and, in the pan room, the nurse examines pad to notice type and amount of P.V. loss. It is often necessary to examine pads for pieces of placenta or membrane in cases of threatened or incomplete abortion. The bowl is labelled and saved for inspection, as necessary. Keep well covered from flies, e.g. in a labelled paper bag. When a number of pads are to be saved for inspection these are placed in a labelled bucket with a lid. They are placed in the bucket in the order of removal.

Observation of perineal pads.
The nurse records the amount of blood loss per vaginum, or other type of discharge, e.g. slight, moderate, heavy. - or increasing.
the nature of the P.V. loss, e.g., bloodstained - bright
- dark
serous blood stained
purulent (containing pus)
mucoid or muco-purulent.
offensive.

Observation of the patient
The nurse inspects any suture line in perineum, e.g., healing,
gaping,
inflamed,
sutures cutting in.
As necessary, sister is asked to inspect the perineum whilst toilet being performed.
The nurse reports if the patient complains of any pain.

CARE OF EQUIPMENT AFTER USE.
The equipment used is washed and sterilized.
It is replaced in the correct areas or else the tray is re-set ready for future use.
If swabs are placed in the bedpan these could block plumbing when pan emptied. Examine the fluid for clots before emptying the pan. Sister may wish to inspect the pan in cases of incomplete or threatened abortion.

Patient instruction.
The patient is instructed not to touch the inside surface of perineal pad.
Patients who are allowed to remove their own pads should be provided with paper bags in which same can be placed.

STERILE PROCEDURES - CATHETERIZATION OF FEMALE PATIENT.

OBJECTIVES:- I. To assist the student to an understanding of:-
a) why catheterization may be necesaary,
b) how to catheterize a female patient,
c) precautions necessary to prevent infection.

(Refer to Doherty, Sirl & Ring, Chapter I3. McClain & Gragg Chapter I5, Harmer & Henderson, Chapt. 3I, Nursing of patients with urologic diseases by Sawyer Chapter 3 & 4).

Catheterization is the introduction of a tube through the urethra into the bladder to remove urine.

Types of catheters used for female catheterization:-

Jacque's catheter No. 6 - 8 for an adult.
This may be of rubber or a plastic, disposable catheter.
Foley's Bag - occasionally ordered when a catheter is to remain in situ. The inflatable bag is filled with sterile water after catheter is passed. A 5 ml balloon is usually large enough to retain catheter in bladder. The balloon is emptied before the catheter is removed. A sterile syringe is used to inflate balloon.

REASONS FOR CATHETERIZATION LEARN 3 REASONS.

1. To relieve retention of urine - e.g. post-operative cases when nursing measures to encourage micturition are not successful.
2. To obtain a sterile specimen for microscopic examination - e.g. in cases of suspected urinary tract infection.
3. To measure amount of residual urine after patient has voided - e.g. after some gynaecological operations. complaints occurring in women.
4. To empty the bladder before an operation on pelvic or lower abdominal organs.
5. To prevent pressure on an internal suture line by a distended bladder - e.g. some bladder and vaginal cases.
6. To prevent contamination of a suture line in perineum.

CATHETERIZATION IS ONLY CARRIED OUT WHEN ORDERED BY DOCTOR.

STRICT ASEPSIS IN SETTING UP TRAY AND IN PERFORMANCE IS ESSENTIAL.

The nurse sets up a trolley or, if this is not available, she uses a hand tray. When a hand tray is used the nurse assembles the unsterile equipment at the bedside. When a tray is used there is limited sterile surface on which to set out sterile equipment. An assistant may be required to undo sterile packages for the nurse performing procedure. In some cases a catheterization tray is available from a central supply dept.

SETTING OF CATHETERIZATION TROLLEY.
Precautions regarding asepsis as for a simple dressing.

Bottom shelf - surgically clean equipment.
Kidney dish for soiled swabs) Covers for same adjacent.
Kidney dish for used instruments)
Measuring jug for urine.
Extension light.
Drawsheet or procedure blanket if latter not already at bedside.

Top shelf - sterile equipment.

Covered instrument tray containing 2 pairs of forceps (I an artery forcep)
2 Jacque's catheters No 6- 8 Eg.G.
(6-8 English gauge = I2-I5 French)
Large bowl containing swabs and 3-4 dressing towels.
Small bowl of aqueous antiseptic, e.g., chlorhexidine I - 2000.
Small bowl for lubricant or sterile normal saline.
2 medium size kidney bowls - one for moist swabs, one for catheter and urine.
Packet of sterile gloves size 6½ - 7.

LECTURE NO. 37 Cont:-

STERILE PROCEDURES - CATHETERIZATION OF FEMALE PATIENT Cont:-

Re lubricant for catheter
Unless precautions are taken there is danger that the lubricant could be contaminated. Tubes of lubricant for catheterization should be kept in a jar of disinfectant and,e.g.,not be from the rectal tray. Always discard the first part that is squeezed out. Whilst a lubricant, e.g. K.Y.jelly, is essential for male catheterization, when a female patient is catheterized it is sufficient if the catheter is moistened with sterile normal saline. Do not use lubricant which contains an antiseptic if specimens are to be collected for microscopy and culture.

Additions to catheterization trolley - these are made according to the requirements of the specific case.

Re catheter to remain in situ :-

Intermittent drainage of bladder - add sterile spigot or clamp, adhesive plaster and scissors.

Continuous drainage of bladder - add sterile tubing approx 90 cms. sterile glass connection (Check tube, connection and catheter fit - before sterilizing if possible).
add to bottom shelf Z.O. & scissors drainage bag and carrier, safety pin.

Re collection of specimens for microscopy - add two sterile containers, e.g., 2 sterile test-tubes with corks
or
2 special bottles from Path.
If the containers for the specimens are sterile on the outside, as well as on the inside, they may be placed in a medium sized bowl on top shelf, otherwise place same on bottom shelf of trolley. The labels for the bottles may be placed on the bottom shelf.

METHOD OF CATHETERIZATION.
Ensure privacy. Explain procedure. Obtain assistance P.R.N.
Place the patient in the dorsal position with the bed-clothes divided at the level of the pubic region.
Position lamp - portion of upper sheet may be used to protect patient's eyes.
The nurse dons mask and thoroughly washes hands - dry same on paper towel.
The genitalia are exposed and the nurse places sterile towels in position - e.g. one over each thigh, one over pubic area, and one on bed covering anus.
The nurse dons sterile gloves.
Swabs moistened with antiseptic and a pair of forceps are placed in kidney dish. This is placed on the sterile towel between patient's thighs.
Taking care that her right hand touches nothing but the forceps the nurse holds the labia apart with her left hand.
With the points of the forcep well covered by the swab the nurse disinfects the area between the labia minora. Each swab is used only once and in a downward direction - left side, right side, and then through the centre, paying particular attention to the urethral orifice.
The used swabs,and then the forceps,are discarded into bowls on bottom shelf.
Still holding the labia apart the nurse places the second sterile kidney bowl with catheter between thighs. The catheter is previously lubricated or moistened with sterile normal saline.
With her right hand the nurse picks up the catheter 3 inches (8 cms) from the eye and passes same directly into urethral orifice. The catheter is inserted $1\frac{1}{2}$ - 2 " (4 - 5 cms.) when urine will commence to flow into bowl.
Should the catheter become unsterilized, e.g., by contacting vulva or vagina a fresh sterile catheter is used. No force is used when passing catheter.
If specimens are required for the laboratory the end of the catheter is carefully placed in tube which is then 2/3rd filled with urine. Two specimens are usually collected - place tubes in bowl & then on bottom shelf.
When the bladder is empty the catheter is withdrawn gently and placed in the kidney bowl with the forceps.
Swab the vulva dry, transfer urine into jug, remove drapes and gloves.
See that patient is warm and comfortable.

LECTURE NO. 37 Cont:-

STERILE PROCEDURES - CATHETERIZATION OF FEMALE PATIENT Cont:-

CARE OF EQUIPMENT AFTER USE.

Depending on the hospital's routine the nurse:-

a) washes and sterilizes equipment used. She replaces all articles in correct place.

or

b) washes the equipment used, checks that tray is complete and returns same to central sterile supply department.

or

c) washes equipment used, re-sets handtray and packages same for autoclaving in theatre.

RECORDING OF PROCEDURE.

The nurse records:- Time of procedure.
Amount of urine withdrawn.
Colour of urine e.g. clear, cloudy, blood stained.

When indicated, she includes in her recording:-
Whether specimens sent to laboratory.
Result of ward tests.
If catheter left in situ for intermittent or continuous drainage
If patient has any complaints these should be recorded.

WHEN CATHETER IS TO REMAIN IN SITU.

The catheter is strapped on to the inner aspect of the patient's thigh and close to the vulva. Allow a small amount of slack so that the catheter will not be pulled out of bladder when patient moves leg. Avoid strapping on hair.

Intermittent drainage. The spigot, or clamp, is released 4 - 6 hourly, or as necessary. Care is taken not to contaminate the end of spigot when same removed. The spigot is replaced with one that is freshly sterilized at least once daily.

Continuous drainage. The catheter is connected to the bedside drainage bag by means of the glass connection and tubing. A freshly sterilized set of tubing and connection replaces that in current use at least daily. Alternate side of bed daily when changing bag. Bags are changed P.N.N. and at the end of each duty period. Collect the used bag in a 2 litre jug with a cover. In pan room empty bag into jug if urine is to be measured. When drain tubes are in use particular care is taken not to tuck the tube into the side of the bed with the bed-clothes. The nurse inspects the tube at intervals to check that it is draining freely with no kinks or loops. Tension on the tube is reduced if a safety pin through the draw sheet is used.

Patient with grossly distended bladder.
Sister may order that only part of the bladder contents are withdrawn when catheter first passed. The catheter is left in situ and released at intervals, e.g. hourly, and 500 ml withdrawn each time.

STERILE PROCEDURES

OBJECTIVES: 1. To encourage the student to apply her knowledge of microbiology in preparing for, and performing sterile procedures, and in the care of equipment after use.

2. To assist the student to develop good habits of asepsis:-
   (a) through her planning of her work,
   (b) method when setting trays and trolleys,
   (c) attention to detail.

(Refer to Doherty, Sirl & Ring, Chapter 32 - re dressing of wounds. Nash's Surgical Book, Chapter 3 & 4 - re tissue repair and inflammation).

PREPARATION OF THE WARD - to prevent air borne infections.

1. Sweeping, dusting and bedmaking completed 1 hour before.
2. Doors and windows closed - to prevent draughts - to reduce traffic.
3. Blankets handled carefully - avoid shaking.
4. Curtains moved gently - well in advance of treatment if possible.
5. All excreta removed. Sputum mugs covered.
6. Limited activity and talking during procedure.
7. A dressing team frequently saves time and facilitates asepsis.

PREPARATION OF THE NURSE - to prevent contamination by contact and droplets.

1. A clean gown is worn whilst setting up sterile trolley.
2. A mask completely covers nose and mouth whilst setting trolley and performing dressing.
3. The hands are washed before setting sterile trolley, before performing dressing, and at completion of same. Sterile lifters are used for sterile equipment.
4. The work is planned so that "clean" wounds are dressed before infected wounds.

PREPARATION OF THE TROLLEY.

A. 1. Sterilize the required articles.
   2. Trolley wiped over with clean cloth and methylated spirits, to remove dust.
   3. Cover on bottom shelf - unsterile articles set out - receivers for soiled swabs and instruments to the front - paper covers for these adjacent. Adhesive plaster and scissors. Light P.R.N.
   4. Wash and dry hands. Don gown and mask.
   5. Using sterile lifters throughout, set top shelf of trolley.
   6. Sterile cover placed on from back of trolley to front - nurse standing in the front.
   7. Instruments are placed on a towel in a sterile instrument dish, with a lid, or on 2 layers of surgical towelling and covered with a folded surgical towel. Instruments are arranged in order of use with handles towards front of trolley.
      Dish is placed on front right hand side of trolley. Aqueous Chlorhexidine.
   8. Working from the back of the trolley the nurse places out required number of bowls.
      e.g. large bowl for dressing pads, gauze and towels.
      medium bowl for swabs.
      1 - 2 small bowls for lotions.
      Contents of bowls are placed in bowls from back of trolley.

A. 9. Additional requirements are added p.r.n. e.g. kidney dish beside instrument tray for catheters or syringe and needles. Cover with small towel. An uncovered kidney dish may be necessary for receiving instruments to be used again during dressing. Measuring glass, jug, douche can, tubing, gloves are added p.r.n.

10. The top cover is placed on from front to back of trolley.

B. HANDTRAY

A trolley may not always be available. Sometimes a handtray is used for small dressings.
The tray is sterilized with the other equipment. Usually a sterile cover is placed on the tray. On this the articles are arranged with sterile lifters. The tray is covered with a sterile towel. To prevent overhang the corners may be tucked inside the corners of the tray before same contact unsterile bench.
An unsterile paper bag for soiled dressings may be arranged at the bedside before commencing the dressing.

C. BASIC TRAY FROM CENTRAL SUPPLY DEPARTMENT.

Just before use, lotions are poured out and additional equipment added as required.

PREPARATION AT THE BEDSIDE.

1. Adequate lighting.
2. Privacy by screening.
3. clear area on locker or heart table for placing equipment.
   Note: TO ENSURE THAT THE PATIENT MAY REST AFTER THE TREATMENT

   All nursing procedures e.g. sponge, pressure areas, toilets etc. to be carried out prior to any dressings or special procedures.

PREPARATION OF THE PATIENT

1. Re-assurance of patient given by explanation, privacy, gentle handling. Instructions to patient re not talking, keeping head turned away and other specific instructions p.r.n.
2. Patient to wear a mask if suffering from respiratory infection.
3. Ensure patient's bladder is empty - offer a warmed bedpan. (Bowel empty for specific procedures).
4. Quilt turned back. Patient placed in position of comfort 1 - 2 pillows. Procedure blanket placed in position.
5. Check drain tubes and bottles to ensure same are not kinked, looped, or tucked in with bedclothes.
6. Binder unfastened and rolled back in readiness or clean one rolled through. Adhesive plaster loosened.
7. Leave site for treatment easily exposable before washing hands.

DRESSING TECHNIQUE.

1. Hands washed thoroughly, rinsed and dried on a paper towel.
2. To bedside - area exposed by assistant or the patient.
3. Soiled dressing removed with forceps and placed in receiver, e.g. paper bag. Forceps placed in second receiver.
4. Wound, or area, draped with sterile towels - furtherest part first.
5. Wound cleansed, non-touch technique using sterile forceps. Hands must never contact sterile stock or wound.
6. Swab wound: Cleanse around wound initially
   Each swab used once only.
   Open wounds swab in outward direction.
   Surgical wounds swab down suture line.

7. If Sister is to inspect wound, cover same with sterile towel and notify Sister.

8. Apply dressing and fasten in place.

9. If adhesive plaster is used remove traces of old plaster with adhesive remover before fresh plaster is applied.

10. Re-position and cover patient.

11. Remove equipment and wash hands.

12. Return to patient, open windows, adjust screens. Re-arrange articles the patient may need, offer drink, unless this is contra-indicated. Check drain tubes.

13. Record dressing or procedure:-
    a) Time of procedure
    b) State of wound, e.g., clean,
       healing,
       inflamed
       gaping.
    c) Amount of disharge or drainage - slight, moderate, large.
    d) Type of discharge or drainage e.g. serous
       serous bloodstained
       bloodstained - bright
       dark
       purulent. - pus.
    e) Number of sutures removed - if any.
    f) Lotions used and type of dressing applied.
    g) Comments re patient p.r.n. - apprehensive
       exhausted
       relieved
       complaining of pain.

CARE OF EQUIPMENT AFTER USE.

All articles are rinsed in cold running water, washed in warm soapy water, or water and detergent. Bon ami is used only to remove stains. Sterilize in High Pressure Steam Sterilizer at 132°C. for 5 minutes. Put away in correct place. Report faulty equipment.
Cutting edged instruments Sterilize by Hot Air Oven or immerse in disinfectant. (See Notes on Sterilization).
Trolley is sprayed with hibitaine between dressings.

DISPOSAL OF SOILED DRESSINGS.

Dressings are best received into a paper bag which is closed before removing trolley from bedside. The bag is promptly disposed of into a soiled dressing bin. (Some hospitals have a chute directly to an incinerator) The bin must have a well fitting lid and should be lined with a heavy paper bag. It should be emptied frequently during the day and then washed out with disinfectant.
The contents are incinerated.
When dressings are received into a kidney dish this should be covered vefore removal from the bedside - e.g. a paper bag or paper towel. This reduces the possibility of air-borne spread of infection and infection spread by flies. It is also necessary for aesthetic reasons. Dressings are always wrapped before disposal into the bin.

USE OF MASKS

Masks are worn for the following reasons:

1. To prevent transfer of micro-organisms from the nurse
   (a) While setting trays and performing dressings.
   (b) While on duty if she has a "cold".
   (c) When attending to patients with some respiratory infections.

2. To prevent transfer of micro-organisms from the patient
   (a) When strict asepsis essential e.g. burns.
   (b) When the patient has a respiratory infection.

Masks are made of at least 6 thicknesses of gauze or butter muslin. A layer of impervious material, e.g. cellophone, makes mask more effective. Disposable masks are often used. They are made of water resistant paper. As a mask is useless when damp it should only be worn for one procedure and then discarded. When there is a layer of impervious material the mask can be worn for longer, e.g. 1 - 2 hours.

To be effective the mask must:

1. Completely cover the nose and mouth and be firmly tied to prevent slipping.
2. Not be touched whilst being worn.
3. Not be worn around the neck or placed in the pocket.
4. To remove mask handle by the tapes only. Place into bowl of disinfectant or into a special laundry bag.

USE OF FORCEPS

When possible, it is recommended that 4 pairs of forceps be used in dressing wounds.
1st Pair is used for removing soiled dressings and is then discarded.
2nd Pair is held in the left hand and used for picking up sterile swabs and dipping same quickly in lotion. Excess lotion can be squeezed out against inside edge of bowl.
3rd Pair is held in right hand and used for swabbing wound. Swabs are transferred from 2nd pair to 3rd pair of forceps for swabbing wound, care being taken that the forceps do not touch.
4th Pair with aid of 2nd pair, is used for arranging dressings.

When used in this way left over stock can be salvaged with the minimum danger of contamination.

STERILE PROCEDURES - INJECTIONS.

OBJECTIVES:- I. To familiarise the student with the different types of syringes in common use.
2. To assist the student to differentiate as to why syringes may be packaged and sterilized by different methods.
3. To familiarise the nurse with how to prepare an injection syringe and needles for autoclaving and how to assemble same aseptically ready for use.
4. To instruct the student in the technique of giving drugs by the hypodermic and intramuscular route and the precautions that are essential.

(Refer to Doherty, Sirl & Ring, Chapter 16, McClain & Gragg, Chapter 20, Harmer & Henderson, Chapter 26; Modern Nursing by W.Proctor, Chapter 8. Illustrations P. 886, 7 & 8 of Brown's Medical Nursing.)

A DRUG is a substance, or mixture of substances, other than food, used in the prevention, diagnosis, cure or treatment of disease.

AN INJECTION is the placement of a drug directly into the tissues by means of a needle and syringe. When a drug is given by other routes than orally this is classified as PARENTERAL administration, i.e. bypassing the gut.

Injections are classified by reference to the tissue area into which the drug is placed.

1. INTRADERMAL - into the dermis or skin.
2. HYPODERMIC or SUBCUTANEOUS - beneath the skin.
3. INTRAMUSCULAR - into muscles.
4. INTRAVENOUS - into veins.
5. INTRATHECAL - into the spinal subarachnoid space.

Ist Year nurses are only concerned with the giving of hypodermic and intramuscular injections.
Students are advised to familiarise themselves with the following syringes

- PLASTIC syringe - sometimes dispensed containing drug for administration - usually disposable syringe - occasionally returned to manufacturer for re-sterilization.
- RECORD syringe - usually of glass and metal
- LEUR & LEUR-LOK - maybe of glass & metal, or all of glass. The nozzle fitment for needle is wider than on Record type syringe. Leur-Lok syringes have special type nozzle to hold needle firmly.
- INSULIN syringe - markings show units of insulin per ml.
- TUBERCULIN " - calibrated in I/100th of ml. Used for intradermal injections, e.g. Mantoux.
- "VIULLE" " - Consist of a metal or plastic 'carrier" into which cartridge of drug is inserted.

CLASSIFICATION OF SYRINGES is by TYPE and SIZE, e.g. 5 ml Record syringe.

CLASSIFICATION OF NEEDLES is by LENGTH, BORE and TYPE, e.g. I" No. 24 Record (needle.
The higher the gauge number, the smaller the bore of the needle.
(This is the opposite to catheters where a large number indicates a large catheter).

HYPODERMIC INJECTION - a I" No. 25 needle is usually used.

INTRAMUSCULAR INJECTION a I½ - 2" No. 22 needle is chosen.
For thick or oily solutions a No.20.

The hub of the needle, i.e. part that fits onto syringe, is different in Record, Leur and Viulle needles.
An adaptor may be used to enable a Record syringe to take a Leur needle or a Leur syringe to take a Record needle. Some needles are disposable.

LECTURE NO. 37 Cont:-

STERILE PROCEDURES - INJECTIONS.

DRUGS FOR INJECTION are dispensed as :
a) a solution in a glass container.
b) a powder to be dissolved in sterile distilled water or n.saline
c) a tablet to be dissolved in sterile water - rarely used now.

AMPOULE - if blue line on neck no file is required, otherwise file neck and remove top after shaking down contents. Use gauze to hold when breaking off top or fingers can be cut.

PHIAL or VIAL - small bottle. May be necessary to sterilize rubber top before needle inserted. Sometimes rubber is protected by metal covering which is removed to expose sterile surface.

MULTI-DOSE BOTTLES - avoid use of same when possible - danger of contamination of contents. Insulin is dispensed in a multi-dose bottle because the dosage varies.

"VIULLE" CARTRIDGE - a glass or plastic cylinder which forms barrel of syringe when placed in carrier. Non- calibrated so difficult to estimate dosage when fractional dose given. It may be necessary to withdraw the required dosage into a record or leur syringe in this case. The rubber seal is disinfected before needle pierces rubber end.

OILY SOLUTIONS - it may be necessary to slightly warm drug by placing container is warm water. This facilitates the drawing up of the drug. A wide bored needle is used for drawing up drug.

The drugs are dispensed as sterile preparations. The nurse is required to sterilize the equipment used.

STERILIZATION OF SYRINGES AND NEEDLES (Refer to lecture on sterilisation, Vol?

HOT-AIR OVEN - 160°C for I hour. Can be used for needles and all glass syringes. Cement affixing glass to a metal nozzle is inclined to melt when a hot air oven is used for repeated sterilization of glass and metal syringes.

WARD HIGH PRESSURE STEAM STERILIZER 132°C for 3 - 5 minutes. Separate piston from barrel, protect points of needles, e.g. on swab.

THEATRE AUTOCLAVE - separate piston from barrel, unless an all glass syringe. Wrap each separately in combine dressing or autoclave paper. Insert needles in piece of gauze. Package in paper or linen. The person preparing the package states on cover:-
Size and Type of syringe and needles & Number of Rubber.
Date.
Her name.

DISINFECTANT - avoid the use of same when other methods are available.
Rustless Chlorhexidine I - 2000 for 30 minutes.
Gauze is placed in bottom of dish to protect needles.
Avoid the trapping of air bubbles. Cover from dust.
Rinse syringe and needles three times in sterile water before use.
A syringe which is wet is very easily unsterilized.

TRAY FOR INJECTIONS - sterile.
Small bowl of sterile swabs.
Small bowl of alcohol.chlorhexedine I- 200.
Small bowl to receive used swabs.
Small kidney bowl containing dissecting forceps.
Small kidney bowl lined with gauze for syringe and needles.
Cover with a sterile towel.

Also required:-
Doctor's orders re drug to be given, dosage, time of administration.
The drug and sterile syringe and needles of suitable size.File
The Dangerous Drug Book if drug of addiction to be given.
A senior member of staff to check orders, drug, the preparing of the injection, and to witness to whom it is given.
Good lighting for preparing the injection.
A sensible nurse who concentrates on the task in hand. She uses strict asepsis. The giving of the drug is recorded - patient's name, drug, dosage, and when indicated, the effect.

LECTURE NO. 37 Cont:-

STERILE PROCEDURES - INJECTIONS.

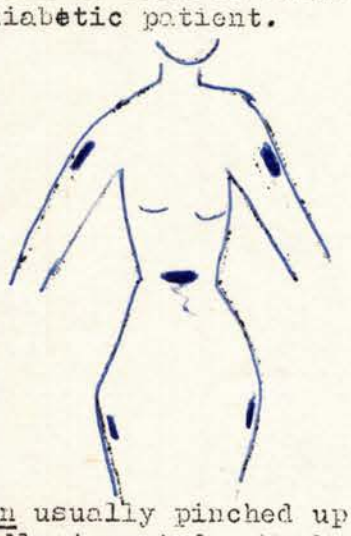
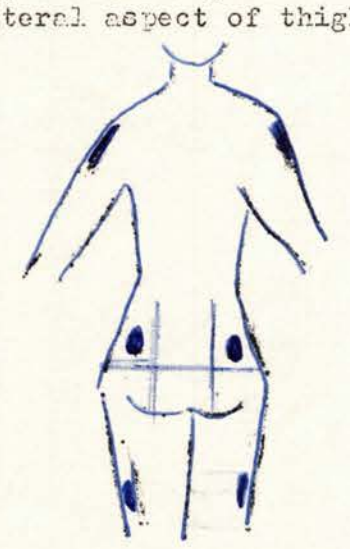
PREPARING THE DRUG FOR INJECTION AND ADMINISTRATION.

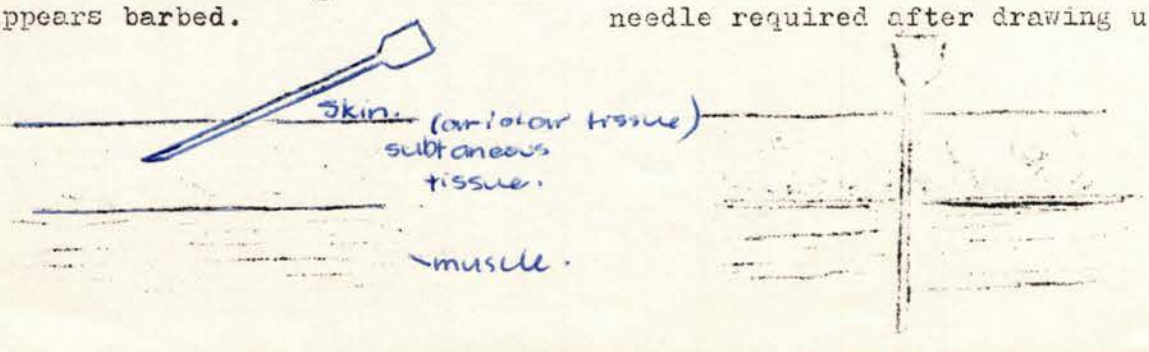
The assembling of sterile syringes is quickly learnt, with a little practise, as is also the drawing up of the drug and the actual technique of administration. The objective is to practise good technique which becomes habitual.

Students are advised to practise assembling the demonstration room syringes and also the administration of injections to the model.

All students are to read Chapter I6 of Doherty, Sirl and King re hypodermic and intra-muscular injections. Students to draw a diagram of position of sciatic nerve. Clear diagram P. I00 W. Proctor's "Modern Nursing".

COMPARISON OF SOME ASPECTS OF INJECTIONS.

HYPODERMIC INJECTIONS	INTRAMUSCULAR INJECTIONS
Used when small amounts given. Used when slower absorption not important.	Used when larger amounts to be given e.g. over I ml. Rapid absorption into blood stream (Unless retarding substance in drug) Used when drug irritating to subcutaneous tissue.
Sites for injection - loose tissue with poor nerve supply. Outer aspect of upper arm. Outer aspect of thigh. Abdominal roll - e.g. self administration of insulin by a diabetic patient.	Sites for injection Gluteal region - upper, outer quadrant - to avoid injury to sciatic nerve Upper outer aspect of arm - deltoid M. Lateral aspect of thigh - middle third.
	
Skin usually pinched up before needle inserted. Maybe held taut. Needle - smaller and finer. Inserted at an angle to skin. Needle inserted quickly. Always have small amount of shaft of needle outside skin. Slightly withdraw piston to ascertain needle not in blood vessel and give drug - but not too quickly.	Skin usually held taut before needle inserted. Needle longer and larger. Inserted perpendicularly to skin. Needle inserted quickly. Always have small amount of shaft protruding through skin - in case needle breaks. Slightly withdraw piston to ascertain needle is not in blood vessel. Do not inject drug quickly - especially large amounts.
Re changing of needle before injection given - not usually necessary if needle kept sterile - unless e.g. same appears barbed.	Re changing needle before giving injection - not necessary if needle kept sterile unless drug is irritating to subcutaneous tissues or a finer needle required after drawing up drug.



BANDAGING

OBJECTIVES: To assist the nurse to develop bandaging skills by:-

(a) Application of the rules for bandaging.

(b) Checking that the bandage fulfills the purpose for which it is applied.

(c) To gain proficiency at bandaging through demonstration and practice.

(Refer to Doherty, Sirl & Ring, Chapter 41.
Bailliere's First Aid Book, "Aids to Practical Nursing" by M.Houghton, Oakes, "Illustrations of Bandaging").

MATERILAS USED:- Gauze, calico, flannelette, flannel, crepe, elastic bandages.

TYPES OF BANDAGES:- Roller, triangular, many tailed bandage, T-bandage, Tube-gauze, Moorefield's eye bandage.

WIDTH OF BANDAGES - Variable depending on size of part to be bandaged and purpose for which bandage is applied. (See textbook).

RULES OF ROLLER BANDAGING.

1. Stand in front of the part to be bandaged, facing the patient (Most cases).
2. Bandage from below upwards, except in the case of a descending spica.
3. Bandage from within outwards except in some foot deformities and some splints.
4. No two parts of the skin should be in contact - use powder and absorbent cotton, e.g. axilla or flexure of elbow.
5. Bandage with a firm, even pressure, but avoid pressure over bony prominences, nerves and blood vessels.
6. The roll of the bandage is kept uppermost and the tail short, (2 - 3").
7. Each turn of the bandage should cover $\frac{1}{2}$ - $\frac{2}{3}$ of previous turn.
8. Avoid wrinkles - each turn must be perfect before passing on to the next.
9. The pattern, (figure 8 or reverse), should be on outer side of limb.
10. Mitre the end of bandage and fasten with a safety pin. The pin is applied where patient will not lie on it and out of the sight of a child patient. A plain pin is never used.
11. A bandage is always re-wound before being re-applied.
12. The tips of extremities must be watched for impaired circulation so leave tips of fingers and toes free.
