

APPENDIX-II

(I) HINTS ON FIRST AID

(1) Bleeding may vary in intensity from severe to slight.

- (a) **Severe Hemorrhage:** Comes from a torn artery or torn vein or both combined. Many large arteries and veins lie close together and are frequently injured together. Blood from an artery in the systemic circulation is bright red. If the injured artery is near the skin, the blood spurts out in jets corresponding to the pulsation of the heart. Blood from a vein is dark red. It flows in a steady continuous stream. Arterial and venous hemorrhage combined usually gushes out from the depth of the wound.
- (b) **Slight Hemorrhage:** Comes usually from injured capillaries and may flow briskly in a continuous stream or merely ooze from all parts of the wound. This type of bleeding is much more easily controlled than severe hemorrhage.

(2) General rules for treatment of wounds accompanied by severe hemorrhage:-

- (i) Place the patient in a suitable position i.e. in recumbent position;
- (ii) Elevate the bleeding part, except in the case of a fractured limb;
- (iii) Expose the wound; removing only whatever clothing may be necessary;
- (iv) Do not disturb any blood clot already formed;
- (v) Remove any foreign bodies which are visible and easily removable;
- (vi) Apply direct pressure with the thumb or thumbs over a pad, if available, to the part of the wound from which the blood is coming, when a foreign body or projecting broken bone is present in the wound; press alongside it and not over it. If the bleeding point is not readily visible, grasp the whole wound area and squeeze it tightly. This will nearly always control the bleeding for a time, and by relaxing the grasp slowly, the bleeding points will be found so enabling pressure to be applied with the thumb.
- (vii) Apply an antiseptic;

(3) For thumb pressure substitute pressure as following:-

- (a) When there is no foreign body or projecting broken bone- Apply a suitable sized dressing and pad over the wound, press them firmly down and bandage them firmly in position. Deep wound may need further pads on top of the first, thus pressing the dressing into the depth of the wound. Ensure that pads projects well above the level of the skin in order to provide adequate pressure on the torn ends of the blood vessels.
- (b) When foreign body which cannot be easily removed or a projecting broken bone is present in a wound:-
 - (i) When gauze or lint dressing are being used, cover the wound with the dressing and build up the pads around the wound to a sufficient heights to allow for pressure to be applied by the bandage referred to in Sub-clause 2 (ix) without pressing on the foreign body or projecting bones.
 - (ii) When prepared sterile dressings and pads are being used, build them up in cone fashion around the wound to sufficient height to cover the wound and to allow for pressure to be applied by the diagonal bandage referred to in Sub-clause 2 (ix) without pressing on the foreign body or projecting bone.
- (c) In the case of wound involving fracture of the dome of the skull a ring pad must be used.
 - (i) Bandage the pads firmly in position. When a foreign body or projecting broken bone is present in a wound, it may be advantageous to apply the bandage diagonally to prevent pressure on the foreign body or projecting broken bone. The bandage should not be applied more tightly than is sufficient to stop the bleeding. If blood still soaks through, apply further pads on top with a fresh bandage, but do not remove the original bandage and pads.
 - (ii) If bleeding is not controlled by the application of direct pressure, apply a firm bandage round the limb few inches above the wound. It is preferable to use a rubber bandage about four feet long and about 2 inches wide with a tape attachment at the end for fastening. At the end of every 20 minutes, the bandage must be relaxed. If bleeding has not ceased, the bandage must be re-tightened. A note must be made of the application and time applied.
 - (iii) Where a limb has been amputated, no time should be wasted in attempting to apply direct pressure, but a constrictive bandage should be immediately applied a few inches above the stump wound.

- (iv) When it is impossible to apply direct pressure successfully for the arrest of arterial hemorrhage as in the case of wound in the throat, high up in the arm, and high up in the thigh, it is necessary to apply indirect pressure to carotid, sub clavian, or femoral pressure points.
- (v) Immobilize the injured part; when the wound is near a joint, immobilize is the joint.
- (vi) When bleeding has stopped : - Keep the patient warm; give him plenty of fluids especially warm tea sweetened with sugar.
- (vii) In the limb fractures, to maintain some extension and give the maximum amount of immobilization, the method of choice is the well-padded splint or splints and when available, they should be used. If a leg is fractured, steady the limb by holding the ankle and place it in its natural position along with its fellow and do not let go until the splints have been fixed. Apply splints on the outer and inner sides of the leg reaching from above the knee to beyond the foot. If only one splint is available, place it on the outer side. Secure splints by bandages (a) above, (b) below the fracture (c) immediately above the knee, (d) round the ankles and feet as a figures of 8 (e) a broad bandage round both the knees.

(4) Treatment of all Fractures of the upper limb:

General Guidelines

Carefully remove the patient's coat or shirt if possible

(a) Fractures of Arm bone (Humorous) :

- (i) Place a pair of rolled Handkerchief in the Axilla lightly.
- (ii) Bend the patient's elbow and lay the injured limb against his chest with the fingers just touching opposite shoulder.
- (iii) Fix the hand in the position with a cuff and collar sling, taking care that there is no constriction at the wrist.
- (iv) Secure the limb firmly to the Chest by 2 broad bandages one above and one below the fracture site.
- (v) Replace the Shirt/Coat and button if possible.

(b) Fracture around the elbow:-

- (i) If elbow can be bent, strap arm to chest and support forearm in a triangular sling.
- (ii) If elbow cannot be bent, strap arm and fore-arm to the side of the body in an extended position.
- (iii) Transport the patient in recumbent position.

(c) Fractures of the fore-arm:-

- (i) Place fore-arm at right angles to the upper arm and place it across the Chest with thumb facing upwards and palm over the chest.
- (ii) Roll a folded newspaper or other Magazine round the fore-arm, if splint is not available. The splint newspaper should be from the elbow to the fingers.
- (iii) Apply one bandage above the fracture and the other over the wrist, first round it and then as a figure of 8 including the wrist and hand.
- (iv) Support the limb by a broad arm sling.

5. **Burns and Scalds** :

General Rules for treatment of Burns and Scalds.

- (1) Do not remove clothing and do not break blisters.
- (2) Wrap patient in a Clean cloth.
- (3) Cover burnt area with sterile or clean dressing and apply bandage. In case of burns covering a large part of the body it is sufficient to cover the area with the clean sheet or towel.
- (4) Keep a patient warm but do not overheat.
- (5) If the hand are involved keep them above the level of the victim's heart.
- (6) Keep burnt feet or legs elevated.
- (7) If patient's face is burnt make him sit up or prop him up and keep him Under observation for breathing difficulty. If respiratory problems Develop, open airway must be maintained.
- (8) Liberally apply ice/cold water or immerse the burnt area in Ice/cold water as cold will reduce the intensity of burns.
- (9) Give large quantities of warm fluids, preferably weak tea sweetened with sugar. If Medical help or trained Ambulance personnel cannot reach the scene for an hour or more, and if the victim is conscious and not vomiting, give a weak solution of salt and soda at the site and en-route. One level Teaspoonful of salt and half level teaspoonful of Baking Soda to be dissolved in water which is neither hot nor cold. Allow the patient to sip slowly. Give about 4 ounces to adult over a period of 15 minutes, 2 ounces to a child between 1 to 12 years of age and about one ounce to an infant. Discontinue the fluid if vomiting occurs.

- (10) Saturate the area, clothing included, with warm alkaline solution (two teaspoonful of baking soda to one pint of sterile water at body temperature). This treatment will relieve pain and there by minimize shock.
- (11) Cover the area with prepared sterile dressing soaked in a similar solution and keep them moist with the solution. If the above solution is not available, cover the area with prepared sterile dressings.

6. **Unconsciousness:-**

- (1) In cases of asphyxia, perform artificial respiration.
- (2) If the breathing is present, lay the patient on his back with his head turned to one side and if necessary, press forward the angle of his jaw so that his tongue does not impede respiration by failing back.
- (3) Undo all tight clothing about the neck, chest and waist.
- (4) Ensure an abundance of fresh air by opening windows and doors, keep back the crowd, remove from harmful gases or impure atmosphere.
- (5) Adopt the special treatment for the condition which has caused the insensibility.
- (6) Remove the patient to shelter in a recumbent position, as soon as possible.
- (7) Give no food or fluids whatever by mouth while the patient is insensible.
- (8) Do not leave the patient until he has been placed in the charge of another responsible person.
- (9) When the patient returns to consciousness, water may be given to drink in sips. If the pulse is feeble, give hot strong tea or coffee sweetened with sugar, unless hemorrhage is apparent or hemorrhage from an internal organ is suspected.
- (10) A desire to sleep should be encouraged except in cases of poisoning by drugs taken to relieve pain or to induce sleep.

7. **Electric Shock:-**

- (1) Switch off the source of current immediately while taking care to prevent from receiving shock yourself. If no means of protection are at hand, drag the patient away by means of dry rope or stick or by giving a strong kick to the patient using rubber or wood or PVC shoes.
- (2) If breathing or heart beat has stopped, start external cardiac massage & artificial respiration which should be carried out for a fairly long time.
- (3) If shock is severe, wrap the patient in warm blankets.

- (4) Do not allow patient to exert physically ,or mentally in any way, how ever slight the shock may be and no matter how well the patient looks and feels .
- (5) Evacuate speedily to the nearest hospital.

(II) **FIRST AID BOX**

Maintenance and replenishment of First Aid Boxes and Stretchers: -

First Aid Box is provided in Break Down trains, stations, workshops, marshalling yard, loco shed, running staff lobby C&W depot, and as personal equipment of guard of all passenger carrying trains.

The following procedure should be followed for maintenance and replenishment.

1. The initial supply of the required of number of First Aid Boxes for all departments would be made by the Medical Department on whom requisition should be placed.
2. Station Managers/Station Superintendents of Guards HQs, Lobby in-charge, SSE/SE(P.way) and other respective departmental in-charge official will be in-charge of First Aid Boxes and will have 10% of their normal requirement as spare.
3. It will be the responsibility of official in charge of the first aid boxes to arrange replenishment of the articles used from the nearest health unit.
4. The Guard or any other official to whom the First Aid Box is issued is responsible for the contents of the Box and if any deficiency is noticed/reported should be brought to the notice of controlling official for recovering the cost of material.
5. The First Aid Boxes required for Guards working Mail/Express and passenger trains should be issued from the subordinate in-charge of the pool of First Aid Boxes to the Guards working the trains.
6. The Guards while taking over the First Aid Boxes should ensure the contents are correct. The Guard will record the train No., Name of the injured person, Ticket No., and items used after rendering First Aid in the injury card, which is available in the First Aid Box.

7. The official in-charge of the First Aid Box should ensure that F.A Boxes are replenished at least once in three months.
8. MS/DMO in-charge of Hospital / Health Unit should ensure that the First Aid Boxes, whenever they are sent for replenishment for replacement of items are correct and contents as per the list (list enclosed in the First Aid Box) which are not in serviceable condition are replaced with fresh one and record should be made in the certificate with his signature to the effect that all the items in the box have been checked and found correct.
9. MS/DMO in-charge should also check all First Aid Boxes periodically in their jurisdiction once in three months to ensure that the articles kept in the First Aid Boxes are fresh as per the schedule and if any discrepancy is noticed, he will arrange to replace the same.
10. A register should be maintained in the Hospital / Health Unit showing the number of F.A Boxes at various establishments and date of check conducted with deficiency noticed.
11. Surprise check of the First Aid Boxes shall be carried by all the inspecting officials and necessary endorsement made in the injury card duly reporting the deficiency noticed to the controlling officer.
12. Minor repairs to the First Aid Boxes shall be done by the respective branches.

(III) STRETCHER

1. A stretcher shall be provided in all passenger carrying trains, Workshops, Stations, C&W depot and Loco Sheds/Crew Booking lobbies.
2. In a passenger carrying train the stretcher shall be in the Chief Guards Brake Van.
3. Adequate number of spare stretchers shall be made available at the train ordering Station. Every passenger carrying train shall be provided with a stretcher.
4. The Medical department will make initial supply and replacement of unserviceable stretchers.

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