

For SNA Members

A Case Study of Ruptured Spleen

*Paper read at the S.N.A. Conference held in Calcutta by Mr. Krupavaram,
Student Nurse, Clough Memorial Hospital, Ongole.*

Name of Patient : Mr. Krupakar
Age : 20 Years
Occupation : College Student
Family History : Unmarried.

Normal Saline 1,000 c.c. with 1 ampule of Kapitaline given. Calcium Gluconate 10% 10 c.c. administered. H. I. Morphine Sulphate gr. 1/8 with Atropine Sulphate gr. 1/150 given.

History of Injury : Two days prior to the patient being admitted to the hospital, while playing football, he collided with another player who struck him in the abdomen. The patient fell down, but after a couple of minutes, got up and continued playing for the rest of the game. During the night he developed severe pain in the abdomen, and pain in his left shoulder which became acute on breathing. He vomited once. On admission to the ward the patient was put on 'absolute rest'. Temperature, pulse and respiration recorded hourly.

Physical Examination : Heart and lungs : Normal. Pulse rate increased but was regular, and the volume good. Abdomen : Was found to be scaphoid in shape with a diffuse area of tenderness, especially in the left upper quadrant; there was no rigidity; liver not palpable; no pain in the renal area.

Blood Pressure—130/75.

Laboratory Examination : Routine examination of urine and blood done. Blood : hæmoglobin : 63%, W. B. C. 9,200.

Urinalysis : Normal.

Diagnosis : Internal injury, with internal hæmorrhage. Probable rupture of the spleen.

Treatment : The patient was given routine preparation for operation; probable splenectomy.

Pre-operative medication : Intravenous injection of Glucose 25%, 100 c.c. and

Anæsthesia : Spinal anæsthetic of 5% Procain, 150 milligrams supported by local Procain 1%. During the operation general anæsthetic of ether was administered.

Position : Dorsal recumbant position.

Operation : Incision : left paramedian.

On opening the peritonium free blood was seen, this was removed and mixed with Sodium Citrate solution of 10%; during the operation 450 c.c. of donor's blood and an auto-transfusion of his recovered blood (1,000 c.c.) was given. On exploring the cavity it was found that the spleen was ruptured. The spleen was freed from the peritoneal attachments posteriorly and elevated into the incision. The end of the pancreas was separated from the splenic pedicle, which was double clamped and sectioned between the clamps, and the spleen removed. The patient was then removed to the Recovery Room.

Note : On examination of the spleen it showed that there were two ragged splits in the lateral surface of the capsule, together with an underlying contusion and hæmorrhage both within the spleen and extra-splenic cavity. The size of the spleen was normal and there was no previous evidence of disease.

Post Operative Treatment : Patient was put into a warm bed after operation, in a dorsal recumbent position. His temperature, pulse and respiration were recorded four-hourly. Pulse regular, volume good.

Medication : Continuous intravenous injection of 1 litre of 5% Glucose and Saline with Calcium Gluconate 10% 10 c.c. II. I. morphia gr. 1/8 given four hourly. Crystalline Penicillin 4 Lac given every 6 hours. Anti-Tetanus Serum 1,500 American units given.

There were no post operative complications. His mouth and back was attended to every 6 hours. Passed urine normally. The administration of Saline was continued intravenously.

Second Day : The patient had rigor and hyperpyrexia. Adrenaline hydrochloride minimums 5 given. Sips of sterile water given during the day. The usual nursing care was carried out.

Third Day : Patient still had a temperature. Intravenous Saline with Vitamin C, 500 milligrams was continued during the day; discontinued later as more fluids were taken by mouth. Fluid diet : Fruit juice, milk, tea and coffee. Routine nursing care given. Enema given.

Fourth Day : Temperature was normal, patient more cheerful. Liquid diet continued.

Fifth Day : Condition improved—liquid diet continued, usual nursing care given. Bowels opened. Soft diet.

Sixth Day : Two stitches removed releasing pus from the subcutaneous tissue under the incision. Wound cleaned

and dressed daily. Patient was put into semi-Fowlers position to allow free drainage.

Seventh Day : Patient was progressing satisfactorily. Bowels opened. Semi-solid food given.

Post-operative Nursing Care (in brief)

The patient was given a daily bed bath; special attention being given to pressure points. His mouth required careful care and was kept in good condition by the use of pot. permang. mouth washes and the application of *Vaseline* to the lips.

To aid drainage, Fowler's position was maintained; a wrinkle free bed and the use of an air ring helped to make the patient comfortable.

Post-operative vomiting was relieved by giving him soda bi-carbonate drinks—5 drams to water 6 ozs.

Diet : The patient was kept on Continuous Saline drip for the three days during which time only sips of sterile water was given by mouth.

On the fourth day when the intravenous drip was discontinued the fluids by mouth were increased and fruit juices, milk, soup, coffee and tea were given him. By fifth day, eggs were added and the diet was increased to light diet.

Patient discharged on the 45th day, wound healed, condition good, no treatment required. Advised to resume full student activities.

Per kind permission of Mr. W. E. Braisted,
M. D. F. R. C. S. (C).

NOTICE

A course in Neuro-Surgery is offered at the United Sheffield Hospital, England. The candidates for admission to the course should be State Registered nurses and hold a Ministry of Labour permit to take salaried employment in England. The period of training is six months during which lectures, practical ward work and theatre experience in the special techniques are arranged in the Royal Infirmary. There is no final examination but a certificate of proficiency will be given upon completing the full course. A salary will be payable in accordance with the scale for staff nurses and residence can be arranged if desired. The syllabus will include :

Pathology of Head Injuries, and Brain Tumours.
Intracranial Aneurysms.
Epilepsy.
Head Injuries and their nursing problems.
Nursing problems following spinal surgery.
Radiological Methods in Diagnosis in Neuro-Surgery.

For further particulars write to :

MISS T.K. ADRAVALA,
Chief Nursing Superintendent,
Directorate General of Health Services, New Delhi.