

Case study example

[Health & Medicine](#), [Nursing](#)



CASE STUDY Sympathetic nervous system responses The sympathetic system affects functions of fight and flight in human beings its part of the autonomous nervous system. The other branch of the autonomous nervous system is the Parasympathetic nervous system whose functions include the rest and digest activities. Sympathetic nervous system is responsible for a number of responses in the body. These reactions include relaxation of the bladder. An Increase in the heart rate so as to increase the amount of oxygen reaching the brain and muscles. There is also dilation of the bronchioles in order to increase the intake of oxygen in the lungs. Consequently, the liver is stimulated to produce more glucose into the blood system so as to provide more energy for muscles (Pino, p. 15)

Coagulation profile

Coagulation refers to the process in which blood changes from liquid to a gel. Coagulation will in turn result in homeostasis and stops blood loss from a damaged vessel. Coagulation profile refers to an analysis of the various components that assist in blood clotting. These substances include Prothrombin time, Activated Partial Thromboplastin Time, Thrombin Time, Fibrinogen, and Fibrin Degradation Products. All these substances have a healthy percentage or value, and deficiency of an element may result in coagulation complications (Blood disorders Para 12).

Blood loss

It may either be internal or external. Rapid blood loss occurs in persons suffering from anaemia. It results in losing large amounts of blood. It leads to a drastic fall in blood pressure and a reduction in bodies oxygen supply. These problems may lead to a heart attack. Chronic blood loss occurs where

a patient loses small amounts of blood from their body organs within an extended period. Rapid blood loss is treated by blood transfusion while chronic blood loss may be treated with the intake of iron supplements usually tablet for several months

Observations and Complications

Several complications may occur during the treatment of bone fractures with the risk of complications varying with the type of bone fracture. In the case of Mr. Liu in the case study, some of the complications may include the development of pneumothorax, respiratory compromise or even flail chest due to the multiple rib fractures. Observations should always be made to make sure it either an open fracture or closed fracture. The skin should be checked if its intact. Radiography results are reviewed thoroughly as a single break is easier to treat than a comminuted fracture. Capillary refill is also checked, if they are no p[resent pulses the patient might have serious internal problems. Sharp bone fragments may tear muscles, nerves and blood vessels. Open fractures may result in osteomyelitis or even long term bone infection (Fractures of the tibia and fibula, pp. 2)

Complications of Care

During the care for patients with bone fractures, several complications may occur. Delayed union occurs where the bone takes longer to heal. Malunion occurs where fractures dont heal in normal alignment while non-union refers to a situation where a bone does not heal at all. All of this situations may be through surgical methods. Poor cast placement is for the above problems. Casts should be for accurate alignment and immobilisation of the fracture. The Risk of infection is also high especially in the case where a surgical

procedure is carried out. This is particularly why Mr. Liu was asked to take cephazolin to reduce the risk of bacterial infection.

References

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