Nat. Volatiles & Essent. Oils, 2021; 8(5): 854 - 858

A Case Report on Fracture of Humerus.

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ABSTRACT: -

Background: Anterior dislocation of the shoulder joint with ipsilateral humeral shaft fracture is a rare injury that may necessitate risky technical skills. Surgical humerus fractures are becoming more common, especially among younger age groups who exert greater demands on their shoulder joints. A number of orthopaedic upper extremity ailments have been linked to resistance training and excessive weight lifting. The most prevalent type of reported injury is acute sprains or strains. Other weightlifting injuries include pectoralis tendon ruptures, distal bicep injury, and shoulder capsule-labral complex injuries. To our knowledge, no examples Surgical humeral fracture in a young adult caused by heavy weight strength training with no underlying medical disease. **Patient history:** A 28 year male was admitted A.V.B.R.H. Sawangi (Meghe), Wardha. Patient chief complaint of chronic pain and wound over right upper limb since 1 day on 06/07/2021 at 9 pm. head injury present, Loss of consciousness, ENT bleed, vomiting. **Past history:**. patient having a no any past medical history like a diabetic mellitus, tuberculosis, asthma etc. and no any past surgical history. **Main symptoms and importance of Clinical findings:** The patient had undergone various investigation like careful history collection, physical examination , CBC, ,CT SCAN , MRI, X-Ray etc. **Conclusion:** A patient was admitted in AVBRH with chief complaints of chronic pain and wound over right upper limb since 1 day(06/07/2021 at 9 pm.) head injury present, Loss of consciousness, ENT bleed, vomiting. etc. After undergoing all investigations he was diagnosed as fracture of humerus.

Keywords: Fracture, Humerus , Dislocation , Shaft

Introduction:

Fracture involving the shaft of the humerus are a common injury among young and middle age adults. The prominent clinical manifestation are Shortening of the extremities due to a visible displacement of the humeral shaft, aberrant mobility, and pain. Radial nerve injury and muscle injury to the brachial artery as a consequence of laceration, transaction, or muscle ossias are the most common complications linked with humerus fractures.[1]

In 1940, In the first case was described by the modern literature. Other writers have reported 22 more similar incidents in 17 papers since then. Direct, external trauma is the most common cause of humeral fractures. However, in this example, a young, amateur athlete presents with acute right upper arm soreness following a ball toss.[2]

There was deformity and discomfort in the right upper arm on touch, but no distal neurovascular abnormalities. X-ray The humerus was found to have a spiral fracture. Several days later, the patient had operational repair of the injuries. On up to three outpatient visits, no problems were recorded a few months later.[3]

Patient specific information:

A 28 year male was admitted A.V.B.R.H. Sawangi (Meghe), Wardha. Patient chief complaint of chronic pain and wound over right upper limb since 1 day(06/07/2021 at 9 pm.) head injury present, Loss of consciousness, ENT bleed, vomiting. After physical examination and investigation doctor diagnosed a case of fracture. patient having a no any past medical history like a diabetic mellitus, tuberculosis, asthma etc. and no any past surgical history.

Primary concerns and symptoms of the patient:

Chief complaint of acute pain and wound over right upper limb since 1 day. These were the primary complication which was observe at the time of admission.

Medical, family and psychological history:

Present case has no any past medical history. He belongs to nuclear family. All family members are healthy except the patient. Patient look fatigued, depressed and scary. He had maintain good relationship with doctor and nurses as well as patient also.

Relevant past intervention with outcome: patient having no any past medical history. Currently he was admitted in A.V.B.R. hospital for further treatment. After some tests and investigation fracture was observed. And his outcome was good.

Clinical findings: A patient is conscious and well oriented to time, date and place. His body built was moderate and he had maintained his personal hygiene. Weight is 60kg. his vital parameters are normal. His development was normal

Timeline:

19 days ago he was admitted in the hospital for the treatment of fracture in humerus. Doctors prescribed a drugs Inj. Tramadol 15 mg, Inj Pantoprazole 40mg, Tab. Limcee 500mg, Tab. Calcium 500mg. and Vitamin supplementary was given for three days.

Diagnostic assessment:

On the basis of the patient's medical history, physical examination, abdominal palpation, and MRI (Magnetic resonance imaging) of the right side of the humerus, ultrasonography of the humerus was performed. Lumber lordotic fracture lateral epicondyle a humerus right side fracture was investigated in this study. Both forearm bones comminated on the right side. The right side of the 2nd, 3rd, and 4th metacarpal shafts also fracture.

Diagnostic challenging:

No any challenging during diagnostic evaluation.

Diagnosis:

After physical examination and investigation doctor diagnosed a case of fracture of humerus.

Routine tests, Random blood sugar (RBS), renal function tests (RFT), haemoglobin .urine routine, and X-ray were all performed.

Therapeutic intervention:

Treatment. The majority of humerus fractures heal without the need for surgery. Patients can be treated with a sling or brace in these circumstances, and the fracture will heal over time. With the majority of humerus fractures, casting is not an option. For the treatment of the diagnostic, the patient was given Inj. Ceftriaxone, Inj. Tramadol, Inj. Emset, Inj. Amikacin, Tab. Trantal, Tab. Calcium. To improve immunological function, calcium and multivitamin supplements were administered for 7 days. He received every treatment and had a positive outcome. And any remedial changes.

Follow-up and outcomes: Doctors takes follow up on daily basis and advice to take medication as time to time and take proper diet and giving psychological support to the patient.

Clinical and patient assessment outcomes: Patient condition was improved.

A 28 year old male is admitted AVBRH. Patient send to the orthopedic department for examination of lower extremity weakness that had been 19 days and had resulted in falls. He also stated that he had been experiencing bladder and bowel incontinence for the previous two days. The holistic examination of our patient revealed dull but severe chronic back pain. He was unable to walk and was experiencing numbness and tingling in his lower extremities. During physical examination, our patient had no bilateral lower extremity reflexes, lower extremity weakness (1 out of 5), upper extremity weakness (3 out of 5), little saddle anesthesia or spine discomfort. His lower extremities lacked pain and temperature feelings, as well as proprioception. There are no negative effects, other for a minor paresthesia. Except for his hemoglobin of 12.1 gm and high BUN-to-creatinine1.2 mg. The coagulation and serum calcium assays were both normal. His Albumin level was 3.2 gm. The amount of alkaline phosphatase in his blood was 142 units per litre .

Adverse and unanticipated event: No any.

Nursing perspectives : IV fluid was provided to maintain the fluid and electrolyte . Monitored heart rate and vital signs per hourly.

Discussion:

When a femoral shaft fracture is combined with an ipsilateral hip dislocation, the injury process is similar to dashboard injuries in car accidents. When the arm extends and abducts, the larger tuberosity on the acromion impinges on the acromion, pulling the humeral head out of the glenoid and dislocating the shoulder anteriorly. Furthermore, the rotator cuff pulls the humeral head lower, causing the flexors and external rotators to move the humeral head anteriorly. Our patient fell with his elbow bent and his shoulder extended and abducted on his right side. According to Sankaran-Kutty, stress is transmitted to the shoulder through the axis of the humerus in cases with simultaneous anterior shoulder dislocation and humeral shaft fracture. The energy is delivered to both the fractured shaft of the humerus. at the same moment, the shoulder joint The type of shoulder injury affects whether the slightly abducted arm is in extension, flexion, or neutral. A humeral neck or glenoid fracture is typical in the neutral posture.[4]

Several therapeutic options for this complicated injury. In two instances, closed reduction and external fixation was also indicated with good results. Plate fixation, on the other hand, was employed in seven cases, with five of them yielding positive results. Radial nerve palsy and brachial plexus injury have been recorded in one case and a radial nerve palsy in another. The usage of pins has been documented in two occurrences, both of which resulted in positive outcomes. Finally, good functional results were reported in the only case that we are aware of that used intramedullary nailing.[5,6]

Two primary conclusions emerge from a review of the relevant literature[7-10]: The first is that therapy for this combination injury is inconsistent. In cases when the proximal piece of the humerus shaft is to allow proper manipulation, the latter is more common. External fixators and Steinman pins have both been described as reduction tools. Furthermore, plate attachment prior to reduction has been shown to be effective. However, we feel that intramedullary nails may be more favorable than alternative methods of fixation in the case of an irreducible anterior shoulder dislocation associated with a humeral fracture for the following reasons: The anteriorly displaced humerus is favored because the nail can enter the humeral head and canal without being obstructed by the acromion. Extra medullary implants (plates, pins, external fixators) may create a lever capable of compromising bone integrity, whereas intramedullary positioning of the nail implant biomechanically facilitates the reduction that will follow because the risk of an iatrogenic fracture during manipulation is reduced. Because these injuries commonly result in soft tissue swelling, less invasive nailing appears to be because the swelling soft tissues are not disturbed, the risk of intraoperative bleeding and post-operative infection is considerably reduced compared to extensive incisions requiring plating[11,12]. The treatment in our situation was dictated by the circumstances. It was decided that a closed reduction of the dislocation was required. Because this was not an option, the next step was to stabilize the fracture so that open reduction of the dislocation could be avoided at all costs. We opted to adopt intramedullary nailing as a fixation treatment based on the information presented in the previous paragraph; nonetheless, there were two main downsides. The first was image intensifier damage, which prevented distal locking from being applied.[6]

Conclusion :

A 28 year old client was admitted in AVBRH with chief complaints of chronic pain and wound over right upper limb since 1 day on 06/07/2021 at 9 pm .head injury is present, Loss of consciousness, ENT bleed, vomiting. etc. After undergoing all investigations, she was diagnosed as fracture of humerus.

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