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Q2

Ans Dignosis of clavicle bone Feature

The basic method to check the clavicle feature by a xray of the clavicle to determine the feature type and extent of injury. In former time xray were taken of both clavicle bone for comparison purposes. Due to curved shape in tilted plane x ray are typically orientated with 15° upwards facing tilt from the front. In more severe cases a CT or MRI scan in taken. the standered method of dignosis through ultrasound imaging performed in emergency room may be equally accurate in children.

Ans

Radiological findings

→ There are the radiological findings of C5/6 are following

i) The x ray view show the left clavicle fracture

ii) Mid shaft at left clavicle of upper limb.

iii) A comminuted acromioclavicular joint.

Pathology finding

The pathology findings are the following of

⇒ fracture of mid shaft of left clavicle of upper limb displayed upward toward Neck

⇒ Greenstick fracture.

During the diagnosis doctor will inspect the affected area for tenderness the swelling deformity open wound x ray on the extent of ray determine collar are or clavicle a broken doctor might also recommend a CT and to get more detailed image.

for clavicle bone feature Diagnosis provider will

- 1) ask about the injury
- 2) do a diagnosis
- 3) order of xray

The diagnosis of clavicle feature includes acromioclavicular joint injury, ~~rt~~ shoulder dislocation and sternoclavicular joint injury.

Other imaging studies that can be used for assessment of clavicle feature include the radiography of clavicle feature

Pathology

Mechanism of injury

Fractions can occur at any part of clavicle. However the vast majority (89-92%) occur in the mid shaft or near the junction of the middle and outer third.

This is due to two factors:
 firstly this is the thinnest part of the bone and the only part of the bone not reinforced by attached musculature and

Ligaments.

Typically fractured clavicles occur as a result of direct blow to the shoulder or fall onto the outstretched arm or cause this. They are common in very young and very old person.

clavicle feature the weakest part of clavicle is the junction of lateral one third and medial third and is the most common site of feature.

Patient position for clavicle ^{broken} feature

- 1) patient is preferably erect
- 2) The clavicle of the affected side is at the center of the image receptor
- 3) affected arm is a neutral position
- 4) Midsagittal plane of the patient is parallel to the image receptor

(4)

Technique factors for clavicle ^{broken} feature

SID

100cm

exposure

60 - 70 kVp

10 - 18 mAs

detector

size

18cm x 24cm

grid

yes

orientation

landscape

Anterior

posterior

projection

The case are clavicle feature

The case 2 are the
the feature of clavicle
bone the bone of upper
Limb the feature the
clavicle is the clavicle
bone broken feature case 2
image position are Anterior posterior
of clavicle bone

Ans

Radiological finding

The following are the radiological findings of Case 1 image.

The x ray image of lateral view of knee joint of lower limb of human body showing femur.

Pathology finding

The following of pathology of the image which are the following

Fracture of patella Linear fracture Displaced Non

Q3
Ans The case 3 image are the
 Feature of the Patella Broken
 Feature of the Lower Limb
 Any of the bone is or around
 the knee can be fractured.
 The most commonly broken bone
 in the joint is the
 patella or knee cap.

Diagnosis of patella Feature

X ray
 X ray image can reveal
 the location of a patella
 Fracture. They are also help
 doctor to determine whether
 the breaks goes all the
 way through the bone
 just affects the
 structure.

CT scan

During CT scan series
 of x ray are taken to create
 two or three dimensional image
 of the patella bone feature.
 The patella and moved to
 different part of the knee

MRI scan

Diagnosing patella broken feature

A patella fracture occur when
 there break in the around.
 movable bone at the front
 of the knee called the
 patella.

(6)

The patella bone are commonly called knee cup.

Most patella feature occurs as the result of direct impact with the ground.

Many New York pedestrian cars while are struck by street.

patient position Lateral image

on side of the patient is laying the knee of interest with the table and the other lower limb rolled anteriorly.

Lateral image are made in the supine position with the knee fixed to 30° the x ray pass through the knee cup joint or patella.

Technical factor

exposure

60 - 70 kVp
7 - 10 MAS

SID

100cm

grid

no

detector size

35cm x 43cm

orientation

landscape

patellar fracture

A patellar fracture is a break in the bone of patella or knee cap. The small bone that sits at the front of knee. Because the patella act shield

Some simple for patellar fracture can be treated by wearing a cast or splint until the bone heals.

⇒ pathophysiology of patella bone fracture

- painful bipartite patella following injury.
- direct or indirect injury result is discupation in fibrocartilaginous zone between main patella and accessory fragment.
- subcutaneous location of the patella make it prone to injury.

Feature injury occurs as result of compressive force such as direct blow.

The patella experience complex dynamic loading pattern with the knee in extension. the pull of the quadricep place the patella. If rapid knee flexion occurs during active contraction of the quadriceps.

(8)

The 3 force bending force may
cause the patella to
fail in compression.

Direction and centring of
X beam

centre of the middle of the
superior border of the medial tibial
condyle, with the
central at 90 degree
to the long axis of
the tibia.

Essential image characteristics

=> The patella should be
projected clear

=> The femoral condyle should
be superimposed

=> The proximal tibio fibular
joint is not
clearly visible

Q1

Ans :- The first x ray image of radius having normal view. There is the feature of radius and the normal x ray view.

2) Second view show displace fracture of radius.

The third show linear fracture and non displace at distal radius.

P Diagnosis of radius Fracture

Diagnosis may be evident clinically when the distal radius is formed but should be confirmed by x ray. The differential diagnosis include scaphoid fractures and wrist dislocation. Fracture not be seen x ray or MRI. Delayed x ray or MRI can confirm the diagnosis.

Symptoms

Pain of bruising and swelling of the wrist.

Cause

Trauma

Ans

Case 4

→ Radiological Finding The following
are the Radiological case 4 image
finding of are

→ Posterior view of hip bones
Showing

→ Ischium

→ Ilium

→ Pubis bone

→ Femur

→ Lumbar

→ Coccyx

⇒ Pathology of finding The
pathology find of case
are following

Both bone of pubis
of hip bone
is fracture Linear
straight in nature.

Diagnosis

The diagnosis of hip
fracture is generally made
by a x ray of hip
and femur hip fracture
occur at the upper end
of the thigh bone -
if the patient fall complain
of hip pain.

→ MRI

→ CT

→ xray