

Mount Elizabeth Novena Hospital

Radiology and Nuclear Medicine Department

(Business Reg. No. 53206920W)
www.parkwayhealthradiology.com.sg

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Date: 8 Feb 2021 / Mt Elizabeth Novena Hospital
Name: PHUA QING HONG BYRAN
ID / Case: S9613536Z / 4021011345
DOB/Gender: 12 Apr 1996 / M MRN: 6264173
Ref. Doctor: DR KANNAN KALIYAPERUMAL
Examination: 5192367 CT CHEST, ABDOMEN & PELVIS
5192369 XR PELVIS
5192371 XR CHEST 1 VIEW

CT THORAX, ABDOMEN AND PELVIS

TECHNIQUE: Multiphasic CT of the abdomen and pelvis was performed. No prior studies available for review at the time of reporting.

FINDINGS:

LUNGS: There is a focal area of opacity detected at the lower lobe of the right lung. This is centered posterior-medially. This involves a region measuring approximately 3.0 x 2.0 cm (series 8, image 68). There is surrounding ground-glass changes detected. Otherwise, the rest of both lungs remain well expanded and aerated. No significant pneumothorax. No significant pleural effusion.

CHEST: Metallic structure bracing the lower margin of the chest, beneath the xiphisternum and extending to the anterior-lateral aspects on the right and left sides of the chest. Streak artifacts are present, causing some image degradation. There is mild separation of the xiphisternum from the main sternum. However, this was already present in the prior CT dated 6 July 2020. No widening of the joint between the manubrium and sternum. There is an oblique fracture seen at the lateral segment of the right 9th rib. This is located at the level just beneath the right anterior-lateral chest wall implant (series 8, image 98).

LIVER, GALLBLADDER AND BILIARY TREE: There are geographic areas of patchy low density seen at the dome of the liver. These are centered towards the anterior half of the liver. Some of these are seen measuring a span of at least 7.2 x 4.5 cm as a cluster. There are some patchy areas of enhancement after contrast administration. On the delayed phase, these areas of enhancement appear to blend slightly into the rest of the lesion. These changes lie just above level of the thoracic metallic chest wall brace. No appreciable perihepatic fluid collection is detected. Gallbladder is unremarkable. Biliary tree is not dilated.

PANCREAS: Enhancement appears to be preserved. No significant laceration.

SPLEEN: No appreciable laceration or rupture.

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KIDNEYS, URETERS AND URINARY BLADDER: Enhancement of both kidneys appear to be symmetrical. No hydronephrosis. No perinephric collections.

ADRENAL GLANDS: Normal.

BOWEL: No pneumoperitoneum. Imaged bowel loops are not significantly dilated. No sizable intraperitoneal collections or fluid layering.

OTHER FINDINGS: Intraarticular fracture of left acetabulum involving the superior and posterior lip. This is largely undisplaced. No dislocation of left hip.

IMPRESSION:

1. The prior CT study dated 6 July 2020 was reviewed.
2. Metallic internal lower chest brace. Streak artifacts causing image degradation and obscuring some imaging details.
3. Oblique fracture through the lateral segment of the right 9th rib, just below the level of the implant. Separation of the xiphisternum from the main sternum remains stable from the prior study.
4. Changes at the posterior-medial aspect of the right lung lower lobe is new and it is compatible with pulmonary contusion in the context of recent trauma. No appreciable pneumothorax. No significant pleural effusion.
5. Heterogeneous conglomerate area at the hepatic dome with areas of faint vascular blush with subsequent blending. This is newly apparent since the prior CT study. In a context of trauma, this is likely related to a sizable 7.2 cm area of hepatic contusion and laceration. No appreciable perihepatic collection currently.
6. No pneumoperitoneum. No bowel loop dilatation.
7. Intraarticular crack fracture of left acetabulum involving the superior and posterior lip. No dislocation of left hip.

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5192475 CT LIMB LOWER RIGHT
5192373 XR FOOT RIGHT
5192372 XR ANKLE RIGHT

respectively.

4. No collapse or fragmentation of the talus.
5. Probable avulsion tiny fleck at the fibular attachment of the anterior-inferior tibial fibular ligament.

Reported by: DR THAM SENG CHOE /
Approved by: DR THAM SENG CHOE
Approved Date: 8 Feb 2021 7:53 PM
This report has been approved electronically.

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CT OF THE RIGHT FOOT CT OF THE RIGHT ANKLE

Multi slice noncontrast CT of the right foot as well as the right ankle was performed. Subsequent separate multiplanar reconstructions were done according to the appropriate planes of the ankle and foot.

The right ankle and foot is placed in a cast.

ANKLE

There is no significant widening of the ankle mortise on these nonstress views.

There is a 0.1 cm calcification seen at the expected fibular attachment of the anterior-inferior tibial fibular ligament (series 10, image 26). This can be related to injury of this ligament attachment site.

Otherwise, the imaged segments of the distal tibial and distal fibular remain intact.

HINDFOOT

Contour and curvature of the talar dome is preserved. No flattening or fragmentation is detected.

There is no dislocation of the subtalar joint. No acute fracture of both the talus and calcaneum. Boehler's angle the calcaneum remains preserved.

MID TO FOREFOOT

Talonavicular and calcaneocuboid joints: There is a fracture of navicular bone. This is centered towards the medial quarter of the navicula. There are several comminuted fracture fragments at this region and these are seen to measure 1.2 cm as a collapsed (series 6, image 9). This is seen probably to involve the medial margin of the proximal and distal articular surfaces of the navicular. In addition, there is also indentation of the distal articular surface of the navicular towards medial third adjacent to its articulation with the medial cuneiform.

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There is subluxation of both the talonavicular and calcaneocuboid joints. Both the navicular and cuboid appear to be subluxed in a plantar direction with respect to the talus and calcaneum respectively.

Medial cuneiform-navicular joint: Fracture dislocation. Medial cuneiform is dislocated medially and proximally with impaction and indentation upon the medial aspect of the distal navicular articular surface. Triangular 0.8 cm fragment at origin site of medial navicular probably related to a shear fracture (series 8 image 72).

First tarsometatarsal joint: Alignment is preserved.

Second tarsometatarsal joint: Fracture dislocation. Longitudinal split fracture extending from base of 2nd metatarsal to proximal shaft with dorsal and lateral subluxation.

Third tarsometatarsal joint: Fracture dislocation. Tiny bony chips involving the base of the third metatarsal as well as the distal articular surface of the lateral cuneiform. Third metatarsal is dislocated dorsally and laterally.

Fourth and 5th tarsometatarsal joints: Fracture dislocation. Tiny bony chips involving the bases of the 4th and 5th metatarsals as well as the adjacent distal cuboid. The 4th and 5th metatarsals are dislocated in a dorsal and lateral direction.

Others: Image segments of the metatarsophalangeal joints show no dislocation.

IMPRESSION

1. Lisfranc and midfoot fracture-dislocation, with Chopart's joint subluxation. Homolateral configuration with concomitant navicular-medial cuneiform involvement. Fractures involving the proximal aspects of the 2nd to 5th metatarsals, most severe at the 2nd metatarsal where there is a longitudinal split component.
2. Fracture dislocation of the navicular-medial cuneiform joint with impaction and indentation of the distal navicular articular surface as well as severely comminuted fracture at the medial aspect of the navicular. Shear fragment at origin of medial cuneiform.
3. Inferior subluxation of both the navicular and cuboid bones with respect to the talus and calcaneum

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