

Liver Laceration Following Blunt Wave Trauma

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A healthy 15 year old adolescent girl was admitted to our clinic complaining of abdominal pains following a severe blow to her back caused by a large sea wave. On examination, vital signs were within normal range and the physical examination was unremarkable apart from abdominal tenderness especially in the right upper quadrant. The liver and the spleen were not enlarged. Laboratory tests including complete blood count and liver function tests were within normal range.

Abdominal ultrasound revealed a linear laceration of the liver [Figure A]. The computed tomography scan disclosed a normal-sized liver, but there was a laceration of the right lobe in the cross-section, and free fluid surrounded the liver and the spleen. The rest of the abdomen was normal [Figure B]. Most pediatric surgeons and pediatric radiologists consider CT the best modality for the evaluation of children

with intraabdominal injury [1]. Ultrasound can be used as an initial screening method for blunt abdominal trauma [2]. It is worthwhile to note that in our case abdominal ultrasound yielded the same diagnosis as the CT [Figures A and B].

The girl was observed for a week until she was free of pain and then discharged for ambulatory follow-up. A follow-up ultrasound 5 months later revealed minimal scarring, indicating that the patient had made a full recovery.

The case presented here demonstrates that non-operative, conservative management can be adopted in cases of solid organ injuries accompanied by hemodynamic stability [3]. The mechanism of injury in this patient is equivalent to that in whiplash neck trauma, although the girl had been standing with her back towards the sea wave. To the best of our knowledge this is the first case of liver laceration in a

child following blunt back trauma by a sea wave.

References

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