

Case Report:

Right Hip and Hamstring

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1 Coronal T2-weighted TIRM demonstrating large haematoma within the muscle belly of the semimembranosus and adductor magnus; note also the diffuse oedema.

Sequence details

Multiplanar T1, proton density and fat suppressed T2-weighted images were acquired of the right hamstring from origin to insertion. The images were acquired on our 3T MAGNETOM Verio.

Image findings

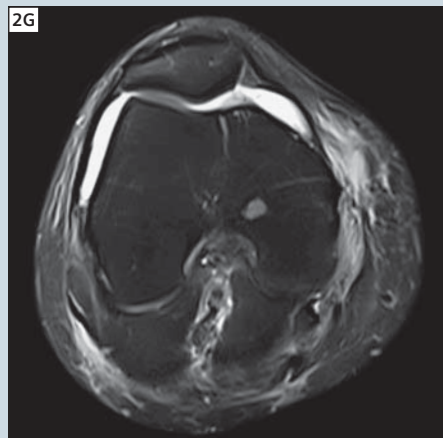
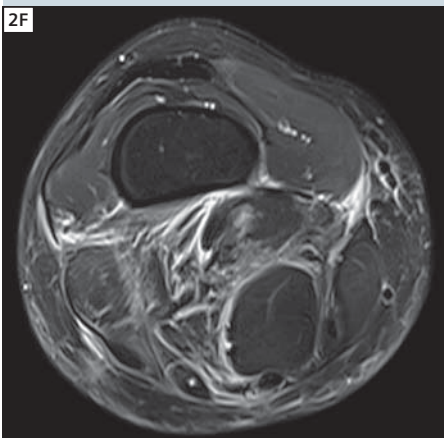
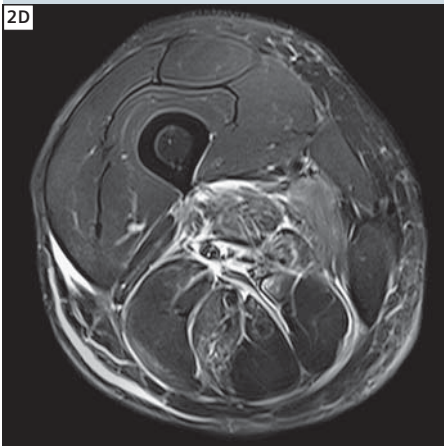
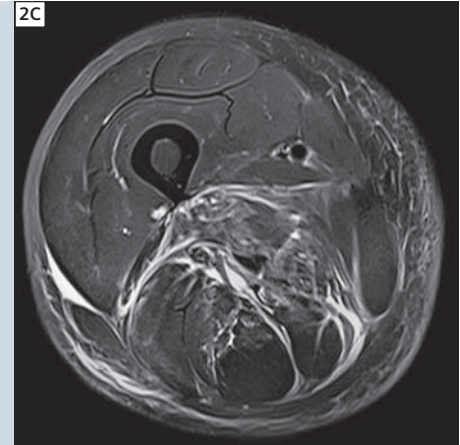
The ischial tuberosity is within normal limits. The hamstring tendon origin is intact. Beginning approximately 6 cm below the insertion there is focal discontinuity and irregularity of the biceps femoris tendon over approx. 1.5 cm. This is associated with extensive oedema in the adjacent muscle belly over at least 7 x 6 cm. Inferior to this level the tendon of the long head of biceps is within normal limits. Diffuse oedema is also demonstrated in the lower 25 cm of the short head of biceps. There is no muscle fiber discontinuity and the distal long head of biceps demonstrates only minor muscle oedema. In addition, approx. 5 cm inferior to the ischial tuberosity there is a large (15 x 6 x 7 cm) haematoma on the anterior margin of the semimembranosus tendon extending into the muscle belly of the semimembranosus. This is associated with diffuse oedema in the adjacent semimembranosus muscle belly. Diffuse oedema with preservation of muscle architecture is also seen over approx. 15 cm of the semitendinosus muscle belly in the mid thigh. The distal insertion of the biceps, semimembranosus and semitendinosus are all within normal limits. Extensive oedema is demonstrated in the soft tissues.

Conclusion

1. Intact hamstring tendon origin.
2. Beginning approx. 6 cm from the ischial tuberosity there is high grade partial / near complete tear of the biceps femoris tendon associated with Grade I injury to the adjacent muscle belly. The tendon reconstitutes distally and there is diffuse oedema throughout the muscle belly of the short head of biceps without focal discontinuity.
3. Approx. 5 cm inferior to the ischial tuberosity there is a large (7 x 15 cm) haematoma within the muscle belly of the semimembranosus, likely extending into the interfascial plane between the semimembranosus and adductor magnus. The tendon remains intact and there is diffuse oedema throughout the adjacent adductor magnus and semimembranosus muscle belly. The appearances are consistent with Grade II tear of the semimembranosus.
4. Diffuse oedema is seen over at least 20 cm of the semitendinosus muscle belly in the mid thigh consistent with Grade I injury.

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2 Transversal small FOV T2-weighted TSE with SPAIR fat suppression of the right upper leg. Images are sorted in craniocaudal slice orientation (A-G).