

# Exostosis and vascular complications, two case reports and review of the literature.

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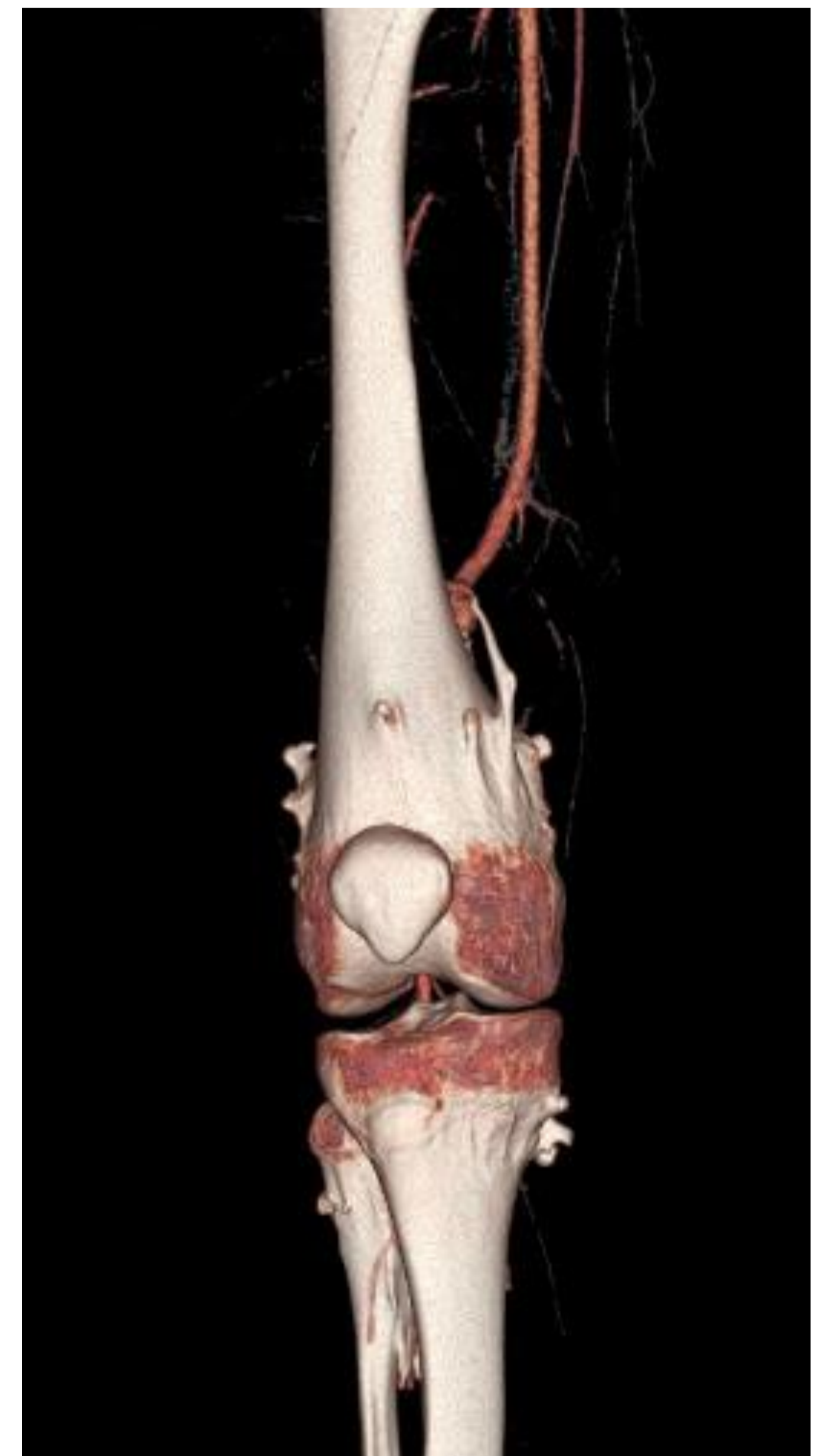
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## Purpose:

Osteogenic exostosis is the most common skeletal tumour. Complications occur in 4% of the cases, however vascular complications are rare. We report two cases of vascular complications, one with a solitary form and the other with hereditary multiple exostosis (HME).

## Case reports:

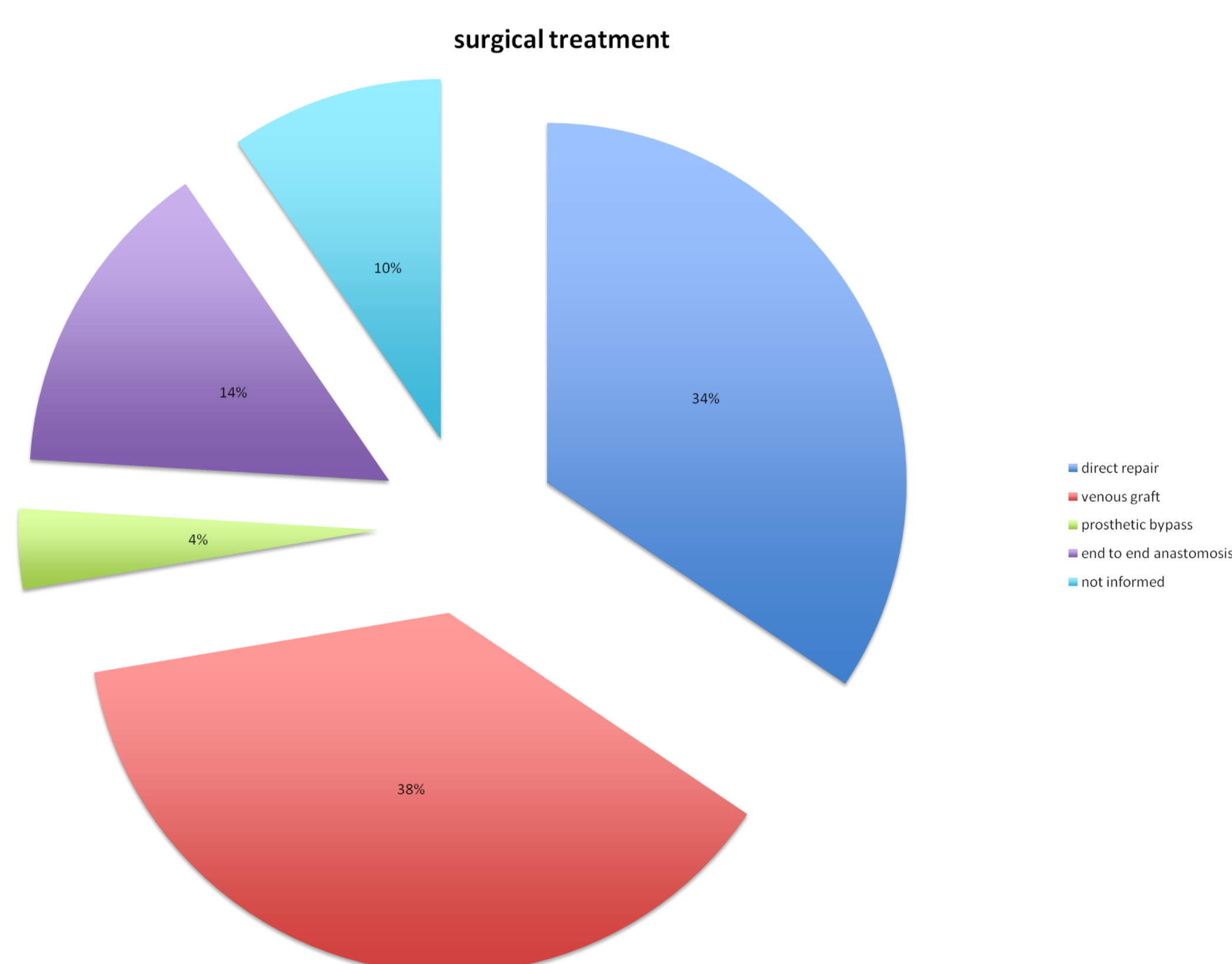
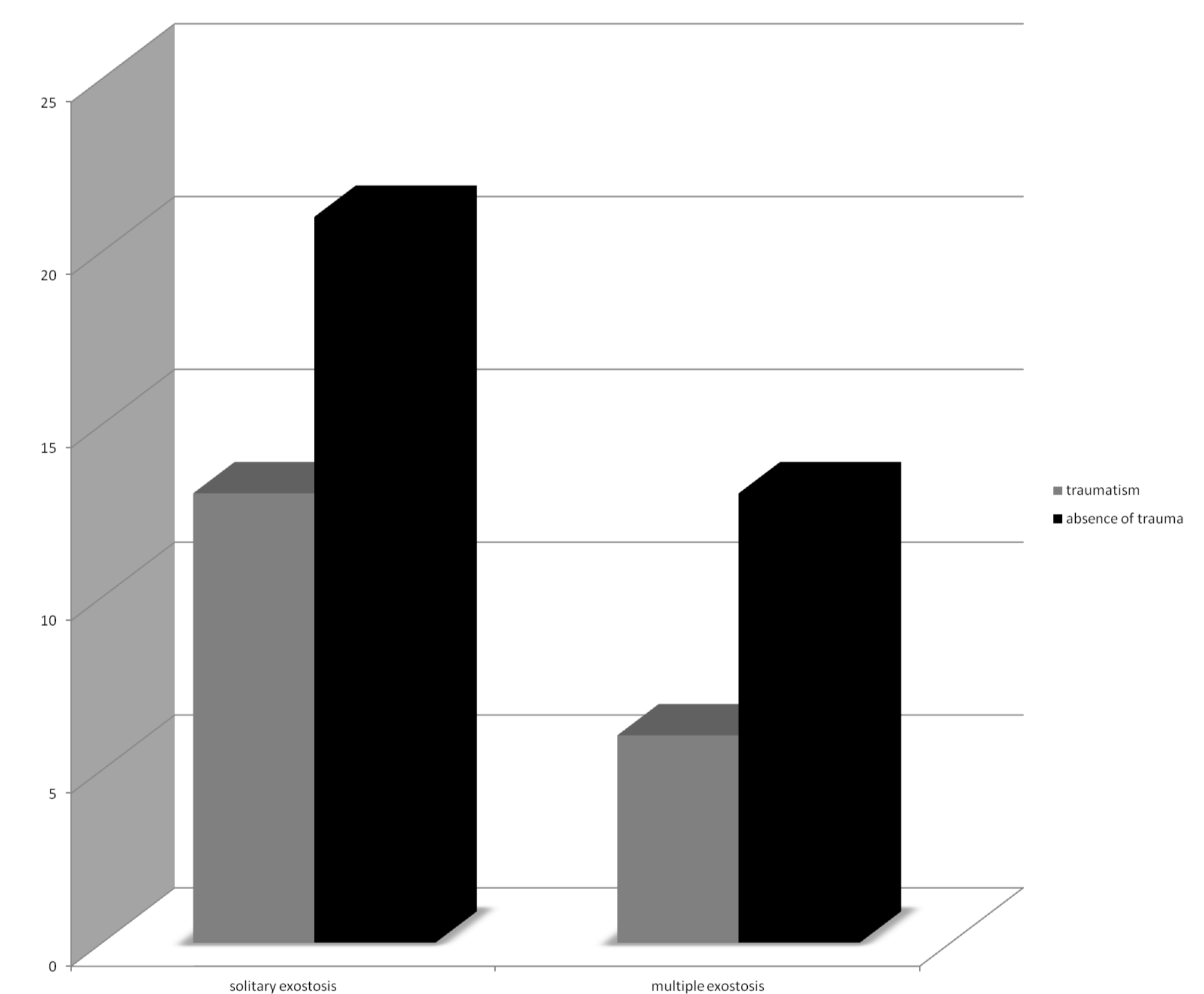
- A 17-years-old male patient with a family history of HME was admitted for a lower limb ischemia with a painful pulsatile mass in the right popliteal fossa. The computed tomography angiography shows a pseudoaneurysm of 7cm diameter. The pseudoaneurysm was repaired with resection and an end to end anastomosis. The exostosis is removed.
- A 17-years-old male patient represented a swelling of the left thigh and a thrombosed pseudoaneurysm on the CTA. We realized an exostosis excision, pseudoaneurysm resection associated with an arterial revascularization with a venous bypass.



## Review of the literature:

Between 1965 and 2012, 57 cases of vascular complications secondary to lower limb osteochondroma were collected. The patients mean age was 20 years (9-51 years). There was a large predominance in men; with 43 male patients (79.4%) and 12 female patients (20.6%).

The most frequent symptoms were: swelling with pain in the lower third of the thigh (26.47%), ischemia (12.7%), isolated knee pain (9.13%), isolated thigh swelling (11.20%), intermittent claudication and thigh pulsatile mass.



58.1% of the patients (22 patients) presented a solitary form, and 34.5% (9 patients) a multiple exostosis. 89% of the cases (49 patients) were a femoral exostosis topography, 9% (5 patients) at the tibia and 1 case at the fibula. A trigger trauma was found in only 36.3% of the cases.

Vascular complications were treated with revascularization by a direct repair of the artery wall (34.5%), interposing a venous graft (38%), and prosthetic bypass (3.6%); or direct end to end anastomosis of the artery (14.5%).

## Conclusion:

The excision of the exostosis associated with surgical treatment of the vascular complications is recommended as an urgent procedure.