Soft tissue tumours in infants masquerading as haemangiomas

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Purpose
Haemangiomas are common benign vascular tumours. The diagnosis is usually straightforward; however, rarely it may be difficult to distinguish from other tumours or vascular malformations. They are diagnosed clinically, but sometimes they can share characteristics with other benign or malignant, vascular or non-vascular lesions, and clinically the diagnosis can be challenging. The purpose of this study is to highlight rare but potentially serious differential diagnoses of haemangiomas.

Method
This was a retrospective study where we reviewed our paediatric dermatology database in order to find patients referred to us with a diagnosis of haemangioma where the final diagnosis was different and in some cases serious and fatal.

Results
In a cohort of 500 patients, 19 patients were identified with the following diagnoses, confirmed by clinical examination, histopathology, and radiological imaging: fibromyxosarcoma; nasal glioma; tufted angioma; congenital alveolar rhabdomyosarcoma; arterio-venous malformation; kaposi's sarcoma; dermatofibrosarcoma protuberans; infantile acnæ; pleomorphic neuroma (NF1); pilomatricoma; malignant rhabdoid tumour and lipoblastoma.

Conclusions
It is important to be aware of the differential diagnoses of haemangiomas. Malignant tumours are usually hyper-vascular and can cause some confusion even with Doppler ultrasound examination.

The most important message is careful examination. Haemangiomas are usually soft and compressible; if the lump is hard on palpation or tethered to the adjacent tissue, a biopsy is mandatory. Treatment can then be focused on the actual diagnosis.