

## **Brown tumour of hyperparathyroidism**

### **Definition**

Highly vascular lytic lesions of the skeleton seen in both primary and secondary hyperparathyroidism.

Encountered as differential diagnosis of giant cell tumour.

### **Epidemiology**

Most commonly seen with secondary hyperparathyroidism secondary to renal disease. May affect any age.

### **Site**

Can affect any part of the skeleton.

### **Pathology**

Grossly: brown friable material resulting from accumulation of haemosiderin within areas of haemorrhage.

Microscopically: giant cells aggregate around areas of haemorrhage, in a background of granulation tissue.

### **Biochemistry**

Elevated calcium

Decreased phosphate

Elevated parathyroid hormone

### **Radiology**

Lesions may be single or multiple, and are often cortical in location.

Typically lytic.

### **Treatment**

If the hyperparathyroidism can be corrected the lesions regress.

Can be surgically excised and bone grafted.