Fifty-nine cases of lesions presenting in the patella were identified after review of the databases of four European bone tumour registries. Of the 59 cases, 46% were non neoplastic, 39% were benign and 15% were malignant. The commonest benign neoplasm was giant cell tumour (GCT) (11 cases). Younger patients were more likely to have a benign neoplasm. Lesions in patients less than 40 years of age included giant cell tumour, chondroblastoma, aneurysmal bone cyst (ABC), osteomyelitis, osteoid osteoma and solitary bone cyst. In patients older than 40 years, the following were common lesions: intra-osseous gout, metastasis and intra-osseous ganglion. Expansion of the patella with thinning of cortex was seen more commonly in GCT and brown tumour in hyperparathyroidism. There was associated soft tissue extension in gout and malignant lesions.