An ossifying fibroma is a monostotic lesion that occurs in craniofacial bones. It usually presents as a painless well-circumscribed, slow-growing mass in the 3rd and 4th decade. It is a benign fibro-osseous lesion that is part of the bigger spectrum of fibro-osseous lesions which includes fibrous dysplasia, juvenile active ossifying fibroma, psammomatous ossifying fibroma, and extragnathic ossifying fibroma of the skull.

An ossifying fibroma, because of its well-circumscribed nature, lends itself to surgery better than does fibrous dysplasia. Simple enucleation is usually sufficient for ossifying fibromas whereas curettage is probably better suited for fibrous dysplasia.

Radiographically, it is seen as a well-demarcated radiolucency in the mandible or maxilla, more common in the former than the latter. It typically measures anywhere from 1 to 5 cm. There may or may not be a central opacity or calcification, depending on the maturity of the lesion. An immature lesion may present as completely radiolucent whereas a mature lesion may be completely radiopaque, although most lesions demonstrate varying degrees of radiopacity. The images above show two samples of the same lesion on opposite sides of the spectrum. Both are well-circumscribed but one is relatively radiolucent while the other is floridly sclerotic.

Is there a pathognomonic finding on x-ray? Unfortunately, there is not one single finding that will distinguish an ossifying fibroma from other fibro-osseous lesion. Does it matter? Yes. X-rays will lead the clinician to one diagnosis or the other and help plan the intended surgery.