

Extraskelatal Chondroma of the Fallopian Tube; An Incidental Finding During LSCS in 32 Years Old Female

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Abstract

Extraskelatal chondroma (also known as "Chondroma of soft parts") is a cutaneous condition, a rare benign tumor of mature cartilage usually occurs in the hands, feet, head and neck. This tumor regularly presents as a small solitary nodule. The histogenesis of the cancer is controversial, but some have suggested a metaplastic origin. Chondroma of the fallopian tube is very rare. There are only three case reports in English literature. The source of this tumor can be subcoelomic mesenchyme of the tubal serosa or mesenchyme of the mesosalpinx. We describe a case of chondroma arising from the serosal surface of the fallopian tube with a review of the literature. A 30-yr-old woman with term pregnancy visited the hospital for cesarean section and tubal ligation. On operating findings, 1×1.5 cm sized nodular mass was noted in the left tubal serosal area. The excised mass showed a multilobulated appearance covered with a thin fibrous membrane. The cut surface was solid, grayish-yellow, and myxoid with a focal gelatinous area. The microscopic finding showed islands and elongated lobules of mature benign cartilage.

Keywords: Chondroma, Fallopian tubes, Incidental Finding

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Introduction

Extraskelatal chondroma is a relatively uncommon benign soft tissue tumor, which usually occurs in the hands and feet. Cancer may also occur around the tendon, synovium, or joint capsule.^[1] Extraskelatal chondroma is a small and usually well-defined nodule of cartilage that is not attached to the bone. It has distinct features from other lesions containing cartilage, such as lipomas with metaplastic cartilage, cartilage associated with synovial chondromatosis, and cartilage found in myositis ossificans. It constitutes approximately 1.5% of benign soft tissue tumors. Patients ranged in age from less than one year to 85 yr or older, but it usually occurs in the thirties or forties. Patients typically have a growing soft tissue mass. It generally is well-demarcated and lobulated, rarely exceeding 2 cm in its most significant dimension. The weight may be firmly attached to tendons or the tendon sheath, joint capsule, and periosteum.^[2]

Rare sites such as tongue testis and liver also have been documented Chondroma of the fallopian tube is extremely rare, with only three reports in the English literature.^[3,4]

We describe an extraskelatal chondroma of the left fallopian tube in 32 years old Female.

Case Report

A 32-yr-old female with term pregnancy gravida 3 para 2 visited hospitals for elective cesarean section and tubal ligation there were no gynecologic symptoms, and the physical examination revealed no remarkable findings. The ultrasonogram also did not show any abnormality. During operation, the gynecologist noted a raised nodular area on the serosal surface of the left fallopian tube the lesion was excised along with bilateral tubal ligation.

The excised lesion was multilobulated and covered with a thin fibrous membrane, measuring 1×1.5×.5 cms. The cut surface was solid, grayish-yellow, and myxoid with a focal gelatinous area. Upon microscopic examination, it was composed of islands and elongated lobules of mature benign cartilage with fibrotic and well-vascularized stroma. The cartilage consisted of bland appearing chondrocytes having well-formed lacunae [Figure 1]. There was no severe cytologic atypia, mitosis or necrosis.

Discussion

Extraskelatal or soft tissue chondromas are rare benign tumors that arise in tissue unrelated to the bone. These tumors usually occur in the hands or feet of middle-aged adults of either sex. Unusual sites such as the testis, liver, and prostate have also been documented. Radiologically, these tumors show irregular soft tissue calcification without the involvement of the underlying bone. The typical pattern of calcification is curvilinear with a ring like densities that outline the soft tissue lobules. However, in our case, radiology was not done.

Grossly, these tumors are well-circumscribed, often encapsulated and have a glassy, myxoid or calcified cut surface. They are usually small, measuring less than 3 cm in diameter. On the light microscopic findings, most tumors are composed of mature hyaline cartilage, often showing foci of dystrophic calcification or metaplastic ossification. Cellularity of the cancer is quite variable and chondrocyte lacunae also tend to vary in size. Sometimes, marked nuclear atypia, pleomorphism, binucleated or multinucleated lacunae are present. Stromal myxoid degeneration is occasionally found. The local recurrence rate is about 10-15%, but there is no reported case of distant or regional metastasis. One-third of soft tissue chondromas are characterized by the presence of immature chondroblasts.^[5] This type is more cellular than the usual ones and may have a greater tendency to recur locally after surgery. A xanthoma-like zone, a myxoid appearance, a fibrogenic and vascularized stroma, or a granuloma-like proliferation can also be seen. Our case presented the typical pattern of chondroma that is composed of islands and lobules of mature benign cartilage in the vascularized stroma. The histogenesis of this tumor is still controversial. Some have suggested synovium as the origin.^[6] However, the fact that many of the lesions arise in areas too distant from synovium argues against this hypothesis, and metaplasia from undifferentiated mesenchymal cells provides an alternative explanation.^[7] It is likely that the tumor cells arise from uncommitted mesenchymal stem cells either by metaplastic or neoplastic processes. The cellular origin varies from site to site. In the tongue chondromas, it is felt that the lesion develops either from residual embryonal tissue in an area of fetal cartilage or from pluripotential mesenchymal cells that undergo metaplasia and differentiate into the cartilage as a result of some irritating stimulus. In the fallopian tube, Spanta and Lawrence suggested mesenchyme of the mesosalpinx or subcoelomic mesenchyme of the tubal serosa as the origin.^[8]

In this case, there was no connection between this tumor and mesosalpinx and it seemed to arise in the serosal layer. Therefore, the subcoelomic mesenchyme of the tubal serosa is more likely to be the origin.

The treatment of choice is local excision. Of importance, the tumor should be obliterated, due to the high recurrence rate

of 10-15%. The tumor in our case was well encapsulated and completely excised

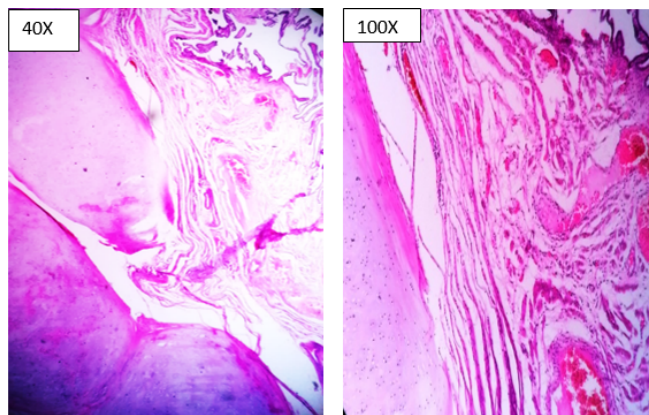


Figure 1: Microphotograph Showing Fallopian Tube wall Along with Lobules of Mature Cartilage (H&E).

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