Tubal ectopic pregnancy associated with an extraskeletal chondroma of the fallopian tube: case report

M. Varras, *M.D., M.Sc., Ph.D.*; **Ch. Akrivis,** *M.D., Ph.D.*; **G. Tsoukalos,** *M.D.*; **Ch. Plis,** *M.D.*; **St. Karadaglis,** *M.D.*; **I. Ladopoulos,** *M.D., Ph.D.*

[1]*Department of Obstetrics and Gynecology, "Tzaneio" General State Hospital, Piraeus;*
[2]*Department of Obstetrics and Gynecology, "G. Chatzikosta" General State Hospital, Ioannina (Greece)*

Summary

Extraskeletal chondroma is a relatively uncommon benign soft tissue tumor, which usually occurs in the hands and feet. The tumor may also occur around the tendon, synovium, or joint capsule. Rare sites are the tongue, testes and liver. Chondroma of the fallopian tube is extremely rare, with only two reports in the English literature. We present the first reported case of extraskeletal chondroma of the fallopian tube causing transportation impairment of the fertilized ovum in a 32-year-old gravida 1, para 1 woman.

Key words: Extraskeletal tumor; Chondroma; Osteochondroma; Fallopian tube; Soft tissue neoplasms; Cartilaginous tumor; Benign tumor.

Introduction

Extraskeletal chondroma is a relatively uncommon benign soft tissue tumor [1]. It is a small, slow growing and usually a well-defined nodule of cartilage that is not attached to bone [2, 3]. Other terms used for this lesion are soft-tissue chondroma or osteochondroma and para-articular or intracapsular chondroma [1]. The most common affected sites are the hands and feet (in about 96% of cases) [4]. The mass may also occur around the tendon, synovium, or joint capsule. Rare sites such as the tongue, testes and liver have been documented [1, 3, 4, 5]. The occurrence of extraskeletal chondroma in the fallopian tube is extremely rare. To our knowledge there have been only two previous reports of chondroma at this site [3, 6].

The present case illustrates the rare coexistence of an ectopic pregnancy and an extraskeletal chondroma arising from the fallopian tube in a 32-year-old woman. To our knowledge this is the first reported case of extraskeletal chondroma of the fallopian tube causing transportation impairment of the fertilized ovum and consequent ectopic pregnancy.

Case Report

A 32-year-old Albanian female, gravida 1, para 1, was referred to the Department of Obstetrics and Gynecology, "Tzaneion" General State Hospital, Piraeus, because of abnormal vaginal bleeding and lower abdominal pain six weeks after her last menstruation. A pregnancy test was positive. Pelvic examination revealed an anteverted, uterus; the right adnexa was tender and palpable. Transvaginal sonography showed the absence of an intrauterine gestational sac and endometrium of normal thickness. Also, the presence of an ectopic pregnancy in the right fallopian tube was suspected. No intraperitoneal fluid was reported. Her serial serum beta-hCG titers were 3700 mIU/ml and 5600 mIU/ml the first and third preoperative days, respectively. The preoperative hematological date showed: hemoglobin 13.1 g/dl, hematocrit 39%, platelet count 269 x 10^9/l and leukocyte count 6.26 x 10^9/l. Preoperative biochemical tests were within normal rates. Under the diagnosis of ectopic pregnancy, a laparotomy was performed. The uterus and left adnexa looked normal, however the right fallopian tube was enlarged, suggesting a right tubal pregnancy (Figure 1). Salpingotomy was performed making a longitudinal incision on the anterior mesosalpinx of the tube and the products of conception were seen inside the tube (Figure 2). Also, a whitish mass measuring 1.5 cm in the greatest dimension was found within the right fallopian tube (Figures 3-5). The mass was firmly attached to endosalpinx (Figure 6) and we removed it very carefully. Finally, the products of conception were extracted and repeated washing of the pregnancy bed resulted in complete removal of all trophoblastic tissue. Once the ectopic material was extracted, meticulous hemostasis was carried out and the incision was left open (Figure 7). The postoperative recovery was unremarkable and the patient was discharged on the fourth postoperative day. The mass was smooth and ovoid with a nodular surface and the histopathology confirmed the presence of an extraskeletal chondroma.

Discussion

Extraskeletal chondroma constitutes approximately 1.5% of benign soft tissue tumors [3]. It occurs predominantly in people of either sex, who are between the fourth and sixth decades of life. However, there is very wide age range, with lesions presenting in patients from one to 85 years [3, 4, 7]. Grossly, these tumors are firm, well circumscribed, lobulated and often encapsulated and have a glassy, myxoid or calcified cut surface. The lesions rarely exceed 3 cm in their maximum diameter [3, 8]. On light microscopic findings, the tumors are composed of mature hyaline cartilage [3]. Areas of calcifica-

Revised manuscript accepted for publication May 28, 2007

Fig. 1

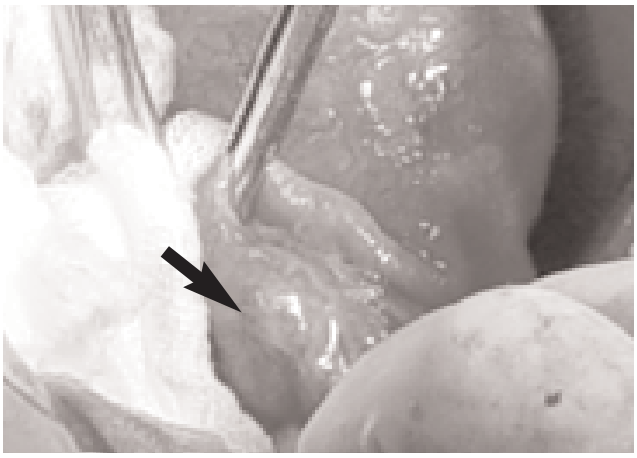

Fig. 2

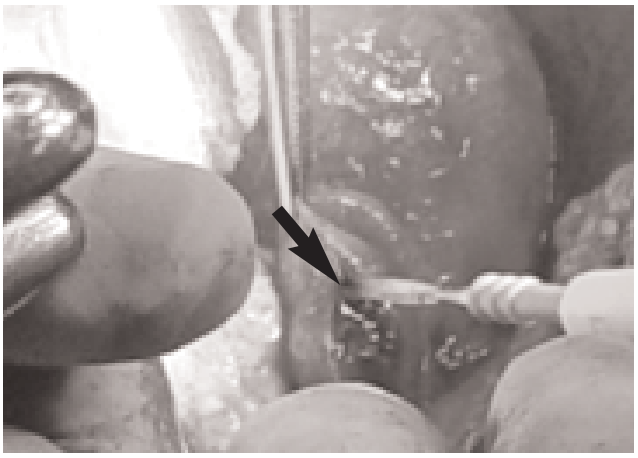

Fig. 3

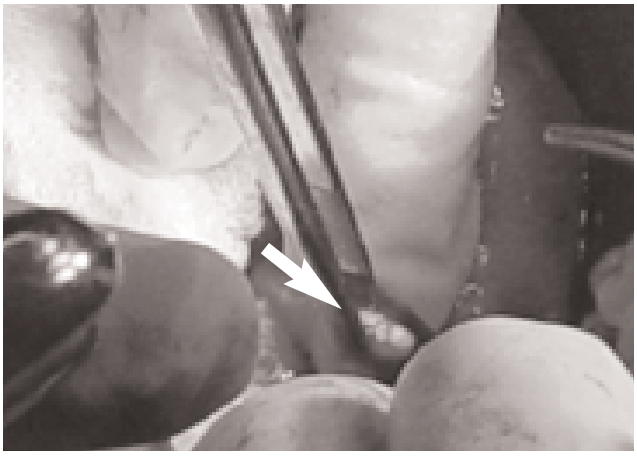

Fig. 4

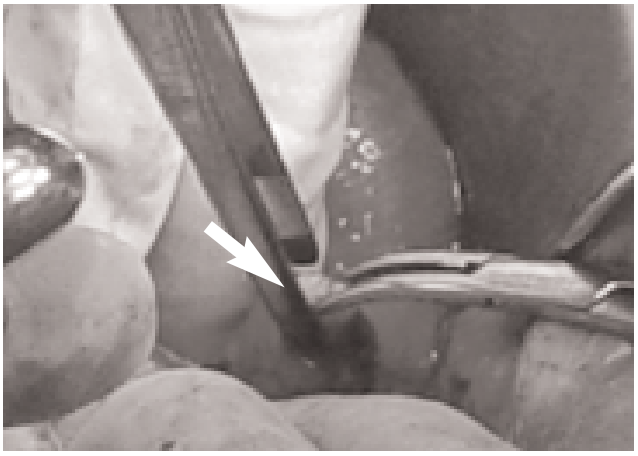

Fig. 5

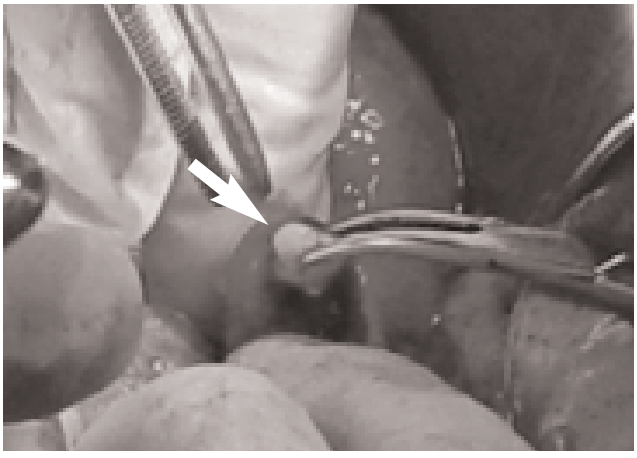

Fig. 6

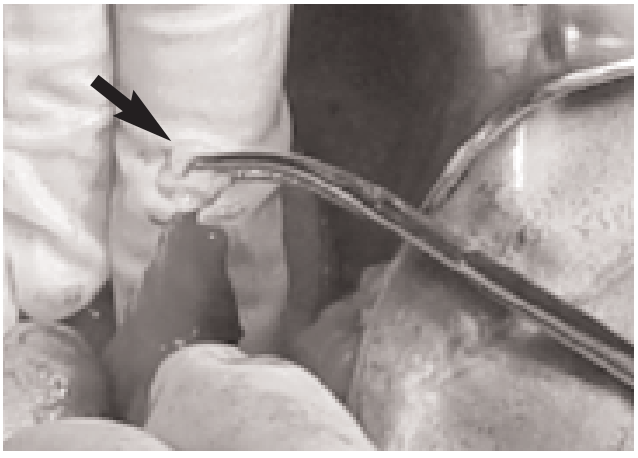

Fig. 7

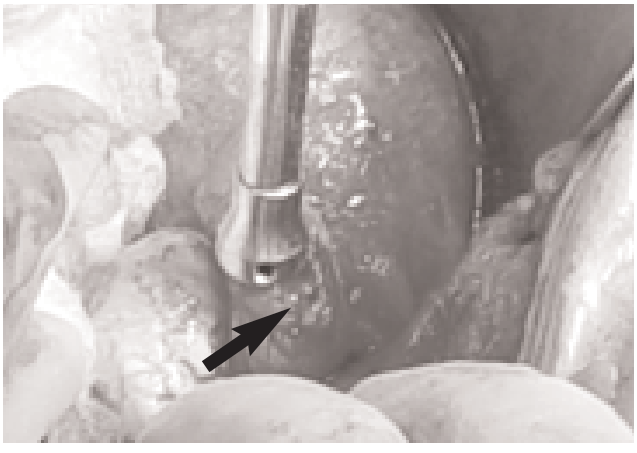

Figure 1. — The right fallopian tube is enlarged suggesting a tubal pregnancy.

Figure 2. — Salpingotomy is performed making a longitudinal incision on the anterior mesosalpinx of the right fallopian tube and the products of conception are recognized inside the tube.

Figures 3-5. — A whitish mass measuring 1.5 cm in the greatest dimension is found within the right fallopian tube at the position of implantation of trophoblastic tissue.

Figure 6. — The mass is firmly attached to the endosalpinx.

Figure 7. — The incision is allowed to heal without primary closure.

tion are identified within the hyaline cartilage and some of the tumors show ossification, fibrosis and myxoid changes. Cellularity of the tumor is quite variable [1, 8, 9]. In addition, granulomatous proliferation consisting of multinucleated giant cells and epithelioid cells is sometimes observed [10]. Cellular atypia may be seen histologically, but no malignant transformation or metastatic lesions have been demonstrated [8, 9]. Lesions appear to arise de novo without any apparent precursor [8]. The differential diagnosis includes tumoral calcinocis, juxtacortical chondromyxoid fibroma, Hoffa's disease, mesenchymoma, synovial chondromatosis, myositis ossificans, periosteal desmoid tumor and soft-tissue chondrosarcoma [2, 3, 4]. Treatment of choice is local excision. Of importance, the tumor should be removed completely, due to the high recurrence rate of 10-15% [3].

We have presented a case of an extraskeletal chondroma of the right fallopian tube as the cause of an ectopic tubal pregnancy in a 32-year-old woman. In general, any factor which impairs the ability of the tube to transport the fertilized ovum predisposes to tubal implantation. Hence, congenital tubal abnormalities, failed tubal sterilization, reconstructive tubal surgery, salpingitis isthmica nodosa, post-inflammatory tubal damage and primary neoplasms of the fallopian tube are all associated with an increased incidence of tubal pregnancies [11]. However, an extraskeletal chondroma arising in the fallopian tube is the most unusual predisposing factor for tubal pregnancies.

References

[1] Kudawara I., Ueda T., Araki N. "Extraskeletal chondroma around the knee". *Clin. Radiol.,* 2001, *56,* 779.
[2] Anthouli-Anagnostopoulou F.A., Papachristou G.: "Extraskeletal chondroma, a rare soft tissue tumor: case report". *Acta Orthop. Belg*., 2000, *66,* 402.
[3] Han J.Y., Han H.S. Kim Y.B.: "Extraskeletal chondroma of the fallopian tube". *J. Korean Med. Sci.,* 2002, *17*, 276.
[4] Avc G., Aydogdu E., Ydrm S., Aköz T.: "Soft-tissue chondroma in the thumb". *Plast. Reconstr. Surg.,* 2002, *110*, 1599.
[5] Kumar S.D., Lal S.J., Asha A.: "Chondroma of the tongue". *Indian J. Surg*., 2003, *65,* 435.
[6] Spanta R., Lawrence W.D.: "Soft tissue chondroma of the fallopian tube. Differential diagnosis and histogenetic consideration". *Pathol. Res. Pract*., 1995, *191,* 174.
[7] Onodera K., Xu H., Kimizuka S., Echigo S., Ooya K.: "Chondroma of the cheek: a case report". *Int. J. Oral Maxillofac. Surg*., 2005, *34*, 924.
[8] Lim S.Ch., Kim Y.S., Kim Y.S., Moon Y.R.: "Extraskeletal osteochondroma of the buttock". *J. Korean Med. Sci*., 2003, *18,* 127.
[9] Gayle E.L., Morrison W.B., Carrino J.A., Parsons Th.W., Liang Ch.Y., Stevenson A.: "Extraskeletal osteochondroma of the foot". *Skeletal Radiol.,* 1999, *28,* 594.
[10] Saito N., Horiuchi H., Toriumi H., Miyasaka T.: "Extraskeletal chondroma of the hand accompanied by proliferating chondroblast-like cells with an eleven-year follow-up". *Case Rep. Clin. Pract. Rev*., 2003, *4,* 66.
[11] Inoue T., Nabeshima K., Shimao Y., Akiyama Y., Ohtsuka T.: "Tubal ectopic pregnancy associated with an adenomatoid tumor". *Pathol. Intern*., 2001, *51*, 211.

Address reprint requests to:
M.N. VARRAS, M.D., Ph.D.
Platonos 33
Politia (Kifisia)
14563 Athens (Greece)
e-mail: mnvarras@otenet.gr