Giant cell arteritis of fallopian tube

A. AZZENA - G. ALTAVILLA (*) - R. SALMASO (*)
F. VASOIN - P. PELLIZZARI - A. DORIA (**) 

Summary: One case of giant cells arteritis involving tubaric arteris in a postmenopausal woman is described.

The patient was 59 years old and presented with asthenia, anemia, fever, weight loss, an abdominal palpable mass and elevated erythrocyte sedimentation rate. Exploratory laparotomy revealed a large ovarian cyst of 14 cm in diameter. Extensive giant cell arteritis, Horton's type, of the small-sizes arteris was found unexpectedly in the fallopian tube of the patient who had had a prior ovariectomy. Giant cell arteritis of the female genital tract is a rare finding in elderly women and may occur as an isolated finding or as part of generalised arteritis.

Key words:

INTRODUCTION

Giant cell arteritis is a disease of the elderly that has been demonstrated most commonly in the temporal arteries, although clinical involvement of other large to medium-size arteries is not uncommon (1, 2).

The disease is characterized histologically by thickening of the vessel wall with marked luminal narrowing. An inflammatory infiltrate of lymphocytes, histocytes, giant cells, eosinocytes and plasma cells is present, especially in intima and media.

The internal lamina elastica is lost or fragmented. Giant cell arteritis of the female genital tract has rarely been reported, with only 17 cases involving the ovaries, fallopian tubes, or uterus recorded (2, 3, 4, 5).

In this report, we discuss the clinico-pathologic findings in a patient with giant cell arteritis of fallopian tube.

CLINICAL CASE

A 68-years-old woman was admitted to the Department of Gynecology and Obstetrics of Padua University because of lower abdominal mass which was detected on physical examination.

Gynecologic history included menarche at age 12 and normal regular menses. She was gravida once, PARA 1001 and had an eventful vaginal delivery at age 25. She had undergone spontaneous menopause at age 50. Her past history revealed an episode of non specific thyroiditis 38 year old and pulmonary tuberculosis in 1930. She had been well until 3 months earlier, when she developed a temperature of 37.8°C, occasional pain in the occipital area associated with chill, increasing fatigue, dyspnea, anorexia and weight loss. In th esame period she noticed a
painfuls nodule measuring 1 cm in diameter in
the right temporal area which spontaneously disa-
peared. In July she was admitted to another
hospital because of elevated blood pressure
(180/120 mmHg); the patient was discharged
with regimen of anti-hypertensive medication.
In August the same year she was readmitted
because increasing of fatigue, fever and weight
loss.

Radiologic examination of the gastro-intestin-
al tract negative, she continued to feel tired and
generalized weakness developed.

The findings of the general physical exam
were unremarkable except for a temperature
of 37.6°C and abdominal mass. The temporal
arteries were not thickened or tender.

The hematocrit was 26.9, the white cells
count 8,600, and the erythrocyte sedimentation
rate (ESR) 89-99 mm/per hr. The hemoglobin
was 10, fibrinogen, alfa globulin and c-reactive
protein were elevated. The skin test for tuber-
colosis was positive but all the other examina-
tions excluded the disease.

Collagen diseases and malignances were
excluded too. An ultrasound examination of the
pelvis disclosed a 5×4 cm cystic right ovarian
mass, the presence of which was confirmed by a
computed tomographic scan of the abdomen.
The patient was admitted to our institute for
laparotomy.

Findings revealed a cystic right ovarian mass
while uterus and left adnexa were normal. A
monolateral salpingo-oophorectomy was per-
formed. The post operative period was uneventful.

PATHOLOGICAL FINDINGS

Gross examination of the specimen re-
vealed a unilocular right ovarian cyst meas-
suring 6×5×4 cm filled with straw-colored
fluid. The cyst wall was smooth with-
out papillation. The ovary measured
2×2.5×1.8 and had a nodular external
surface, fallopian tube appeared unremark-
able. Microscopic examination revealed a
cyst lined by flattened to cuboidal epiteli-
tum and classified as a simplex cyst
(Fig. 1). Many small arteries of the fallo-
pian tube showed a granulomatous arte-
ritis with a transmural inflammatory in-
filtrate of the media and composed of lympho-
cytes, plasma cells, histiocytes, and
multinucleated giant cells (Figs. 2 and 3).
Intimal thickening by fibrous tissue was
present, and the lumens of some vessels
were obliterated by the fibrosis or inflam-
matory infiltrate. Elastic tissue stain re-
vealed that the internal elastic lamina was
fragmented and that numerous epithelioid
histiocytes and giant cells lay adjacent to
the fragmented elastic fibres. There was
no infiltration of eosinophils or polymor-
phonuclear leukocytes, and no fibrinoid
necrosis.

DISCUSSION

Giant cell (or temporal) arteritis is a
disease of the elderly that generally in-
volves the carotid arteries or their bran-
ches, especially the temporal arteries. It
has been shown to have a more generali-
ed distribution, however, with a clinical
evidence of involvement of large extra-
cranial arteries in 15-20% of cases (6) and
disseminated small vessel giant cells arte-
ritis in some cases (1). Rare cases of giant
cells arteritis involving medium-sizes arte-
ries of the breast have been described (7).
Localized involvement of small, medium-
size arteries by necrotizing arteritis histo-
logically similar to polyarteritis nodosa has
also been reported occasionally in the
kidney (8), mesentery of the intestine (9)
and in the gallbladder (7) in patients with
temporal giant cell arteritis.

Seventeen cases of giant cell arteritis
involving the female genital tract have been
reported (2, 3, 4, 5, 8). Each patient
had clinical findings similar to the patient
described in this report.

All of them were postmenopausal, ran-
ging in age from 59 to 82 years. Ten of
the patients presented with shoulder pain
or fatigue and weakness and were found
on physical or radiological examination to
have a pelvic mass (2, 3, 5, 8). Twelve pre-
sented fever and weight loss (4, 9).

Laboratory examination in the cases re-
ported in literature revealed anemia and
elevated ESR rate. Our patients were also
anemic and the ESR was elevated. Thir-
Fig. 1. — Peritubaric arteries evidence a massive transmural inflammatory infiltrate (Em. Eos. 8 ×).
	een of the patients whose cases were previously reported had symptoms suggestive of polynealgiea rheumatica (1, 4, 9); one had symptoms of temporal arteritis (5) and one patient had temporal artery biopsy postoperatively that had shown temporal arteritis (10).

Removal of the ovaries and fallopian tube with or without the uterus was performed because of pathologic lesion unrelated to the giant cell arteritis in all 17 cases. Histologic examination in all the cases unexpectedly showed typical giant cell arteritis involving predominantly the

Fig. 2. — Artery with intimal fibrosis and a transmural infiltrate of lymphocytes (histiocytes) and giant cells (Em. Eos. 40 ×).
media of the small to medium size arteries.

It appears that the giant cell arteritis of the female genital tract may be either an isolated finding or may be associated with giant cells arteritis in other sites.

Ten patients with symptoms of polymyalgia rheumatica (3, 8), two with signs of temporal arteritis (9) were treated with prednisone and had marked symptomatic improvement. One had systemic symptoms, anemia, elevated ESR and had a thoracic aortic aneurysm detected 5 years postoperatively. Although a causal relationship to previously diagnosed giant cell arteritis cannot be proven, the frequency of aortic involvement with aneurysm formation in this disease indicates the probability of relationship. These findings suggest that symptomatic patients in whom giant cell arteritis is diagnosed on examination of the female genital organ should be treated, both to allay the symptoms and to prevent further complications.

Alternatively, four patients described in the literature all of whom were asymptomatic, received no therapy and remained well (2, 9). It may be unnecessary, therefore, to treat asymptomatic women in whom giant cell arteritis of the female genital tract is an incidental finding.

The histological differential diagnosis of giant cell arteritis includes other forms of vasculitis. Vascular lesions necrotizing arteritis type have been reported in the female genital tract as a part of systemic disease (9). The histological appearance of this disease differs from that of giant cell arteritis, in that the inflammatory infiltrate is more acute, eosinophils are present, and fibrinoid necrosis is more extensive.

Wegener’s granulomatosis is a form of granulomatosis arteritis which is histologically similar to giant cell arteritis; however, the extensive necrosis of vessel walls and areas of extravascular necrosis that are characteristic of Wegener’s granulomatosis are not seen in giant cell arteritis.

In summary, giant cell arteritis is an unusual finding in the small-medium-size arteries of the female genital tract of elderly women and may represent either an incidental localized finding or may be a manifestation of giant cell arteritis involving multiple sites. Female patients in whom this lesion is found unexpectedly in a specimen from the genital tract should be investigated thoroughly for involvement of other sites, and treated appropriately if the finding suggest generalized disease.

REFERENCES


Address reprints requests to:
A. AZZENA
Inst. Gynecology and Obstetrics
Via Giustinianii, 3
35128 Padova (Italy)