# INGUINAL ECTOPIA OF THE OVARY AND THE UTERINE TUBE

by

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The ovary develops from the middle part of the genital ridge; the cranial part becomes the suspensory ligament, while the caudal part is incorporated in the ligament of the ovary. The ovary initially develops as an abdominal organ, but later migrates to the pelvis. The gubernaculum develops in the inguinal fold and in the females, as it traverses the mesonephric fold, it acquires an additional attachment to the lateral margin of the uterus near the entrance of the uterine tube. The upper part of the gubernaculum forms the ligament of the ovary and the lower part forms the round ligament of the uterus. The ovarian descent normally ceases after the twelfth week, at which time the ovary is at the pelvic brim. Lateral rotation subsequently brings it to its final position. The canal of Nuck, extending into the labium major, corresponds to the processus vaginalis of the male. It is normally obliterated by the eighth month.

Anomalies in the normal migration of the ovary occur from time to time, but the incidence is rare. Herniation of the ovary in the inguinal canal or labium major is homologous to the normal descent of the testis. It has been postulated that unlike the testicular gubernaculum, the ovarian gubernaculum does not shorten because it unites with the uterus. The failure of the ovarian gubernaculum to unite with the uterus probably permits its shortening, with resultant descent of the ovary (Gray and Skandalakis, 1972). The possibility of a temporary hormonal imbalance resulting in the shortening of the ovarian gubernaculum has been postulated but has not been demonstrated.

The ovary, with or without the associated structures like the uterine tube and the uterus, may be present in the inguinal canal or the labium major. Mayer and Templeton, (1941), proposed the term 'Ovarian hernia' for the presence of only the ovary and this, in their view, corresponded to the descent of the testicle in the male. When the herniated ovary is accompanied by the uterine tube and occasionally by the uterus as well, it is termed 'Ovarian ectopia'. In practice this differentiation is not always easy to apply as in longstanding ovarian hernia other abdominal organs may also herniate. Uterine and vaginal anomalies may be associated in these cases (Andrews, 1906).

The presenting symptom is the presence of a mass in the inguinal canal or the labium in an adolescent girl or during infancy and childhood. Torsion and strangulation of the herniated ovary or the tube occurs in nearly twenty per cent of the patients and these may present with acute symptoms of recent onset. Rarely, pregnancy may occur in the herniated uterus.

Clinical examination reveals the presence of a non-reducible painless mass in

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the inguinal canal or the labium major. Reducibility and expansile impulse on coughing may be present in the associated hernial sac. Rectal examination reveals the ectopic uterine tube as a band-like structure passing from the uterus to the inguinal canal. Vaginal examination may show the lateral displacement of the uterus.

Excision of the herniated ovary and the tube has to be carried out in about 66 per cent of the cases because of torsion and strangulation, malformation, cystic degeneration or atrophy of the ovary (Mayer and Templeton, 1941). Simple reduction of the herniated ovary and the tube and closure of the sac is carried out in the absence of complications (Gans, 1959).

## CASE REPORT

S: (7388-73), a fifteen year old girl, was admitted with a swelling in the right inguinal region for the last seven years and pain in the swelling off and on for the last one year. The swelling was constant in size but for the last two years she had been noticing another swelling lateral to it, which, used to appear on coughing and straining. The menarche was at the age of thirteen years and the menstrual history was normal.

Physical examination revealed a non-reducible, tender, firm swelling, 4 x 3 cm. in size, over the right external inguinal ring. There was an incomplete inguinal hernia presenting lateral to the swelling and it showed the presence of expansile impulse on coughing.

With a preoperative diagnosis of right inguinal hernia with omental incarceration, the inguinal canal was explored through an inguinal incision. There was a small hernial sac lateral to the deep epigastric vessels. In the superficial inguinal pouch the right ovary and the uterine tube were lying and the gubernaculum was extending from the ovary to the labium major. The ovary was atrophic and showed dense fibrous adhesions with the surrounding tissues. The hernial sac was empty. The sac was ligated at the internal ring and the redundant part was excised. The atrophic ovary and the uterine tube were also excised. Bassini's repair was done and the wound was closed in layers. Histological examination revealed scarring and fibrosis in the ovary, suggestive of previous episodes of torsion.

*Summary*

Ovarian ectopia is a rare condition. One case of ovarian ectopia has been recorded and the embryological and clinical aspects of the condition have been reviewed.

*References*

1. Andrews. F. T.: Transactions of the American Gynaecological Society, 31: 407, 19
2. Gans, S. L.: Arch. Surg., 79: 109, 1
3. Gray, S. W. and Skandalakis, J. E.: bryology for Surgeons', W. B. Sau Company, Philadelphia, London, Tor page 589.
4. Mayer, V. and Templeton, F. G.: Ar Surg., 43: 397, 1941.