

# Endometriosis and umbilical swelling

A. D. K. HILL - P. E. BANWELL - Y. SANGWAN  
A. DARZI - N. MENZIES-GOW

*Summary:* Umbilical endometriosis should be considered in the differential diagnosis of an umbilical swelling. The diagnosis is made by histological examination as clinically there may be no relationship between the swelling and menstruation.

*Key words:* Endometrioma; Umbilicus.

## INTRODUCTION

Umbilical swellings are commonly hernias. The differential diagnosis of umbilical tumours associated with seropustular or bloody discharge should include primary or metastatic carcinoma of the ovary or gastrointestinal tract, nodular melanoma, keloid or pyogenic granulomas. Embryologic remnants such as a patent urachal duct, persistent vitelline duct and polyps of the umbilicus should also be considered in the differential diagnosis (Burn and Burkheisser, 1955). We report a case of an umbilical endometrioma in a young woman.

## CASE REPORT

A twenty five year old married woman presented with an umbilical swelling which had developed slowly over a period of six months. The swelling was intermittently painful and discharged brownish material. Her menstrual cycle

was normal. She was nulliparous and had been taking oral contraceptives for four years. She denied any history of dysmenorrhea or dyspareunia. Pelvic examination was normal.

Physical examination revealed a firm, nontender brownish black irregular umbilical swelling. A cough impulse was absent and the swelling was irreducible. A provisional diagnosis of an irreducible umbilical hernia with incarcerated omentum was made. At operation no hernial sac was found and the cut surface showed a solid swelling with some altered blood. An excision biopsy of the lump was carried out with primary closure of the skin. Histological examination revealed endometrial tissue compatible with endometriosis.

## DISCUSSION

Endometriosis is defined as the presence of ectopic endometrium in tissues other than the uterus (Beecham, 1966). Endometriosis is found mainly in the pelvis and occurs in about 10 per cent of all women. Endometriosis of the skin is usually in an area of scarring following a gynecological operation.

However, spontaneous endometriosis has been described in the umbilical and inguinal region (Steck and Helwig, 1965). The first umbilical endometrioma was described by Villar in 1886. Over 110 cases

---

Department of Surgery  
Central Middlesex Hospital  
London, United Kingdom

*All rights reserved* — No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, nor any information storage and retrieval system without written permission from the copyright owner.

have been reported since. Umbilical endometrioma represents about one per cent of all ectopic endometrial tissue (Harvey, 1976). The classical umbilical endometrioma is a dark brown tumour that enlarges during the menstrual period, becomes engorged and tender, and secretes blood-stained fluid at the onset of menstruation. They are usually one to three centimetres in size although larger umbilical endometriomas have been described (Latcher, 1953). Malignant change in endometrioma is rare (Popoff *et al.*, 1962). Diagnosis may be difficult in the absence of characteristic symptoms. Typically, umbilical endometrioma enlarge and become tender with onset of menstruation. Other symptoms may include irregular menstruation, dysmenorrhea, pelvic pain or dyspareunia. However, even silent umbilical endometrioma have been described (Harvey, 1976).

Ectopic endometrial tissue does not always respond to hormonal changes during menstruation. The diagnosis in our case was difficult because of the absence of symptoms of pelvic endometriosis and the absence of increased swelling at the time of menstruation. Treatment is usually by hormonal manipulation or surgical excision. Progesterone, estrogens, androgens and synthetic analogues like danazol have been advocated. Galigaris *et al.* (1984) and Charles *et al.* (1979) recommend danazol as a form of treatment. In our patients there were no symptoms related to menstruation, so simple excision was performed.

Various theories of histogenesis have been proposed to explain ectopic endometriosis. Sampson (1921) theorized transtubal regurgitation of menstrual blood. Coelomic metaplasia, which develops as a result of abnormal differentiation in the germinal epithelium of the pelvic peritoneum

is one explanation. Lymphatic spread from the uterus via the lymphatics during menstruation has been suggested as an alternative explanation. Haematogenous dissemination has been postulated for lesions far away from the pelvis.

In conclusion, umbilical endometriosis should be considered in the differential diagnosis of an umbilical swelling. The diagnosis is made by histological examination, as clinically there may be no relationship between the swelling and menstruation.

#### REFERENCES

- Burn M. F., Burkheisser S. W.: "Umbilical endometriosis". *American Journal of Obstetrics and Gynecology*, 1955, 69, 895.
- Beecham C. T.: "Classification of endometriosis". Editorial. *Obstetrics and Gynecology*, 1966, 25, 437.
- Steck W. D., Helwig E. B.: "Cutaneous endometriosis". *Journal of the American Medical Association*, 1965, 191 (3), 101.
- Harvey E.: "Umbilical endometriosis". 1976, 112, 1435.
- Latcher J. W.: "Endometriosis of the umbilicus". *American Journal of Obstetrics and Gynecology*, 1953, 66, 161.
- Popoff L., Raitchev R., Andreev V. C.: "Endometriosis of the skin". *Archives of Dermatology*, 1962, 85, 66.
- Galigaris P. H., Masselot R., Ducassou M. J.: "Endometriosis in the abdominal wall". *Journal de Gynecologie, Obstetrique et Biologie de La Reproduction (Paris)*, 1984, 10(5), 465.
- Charles S. X., Samyktha K.: "Endometriosis of the umbilicus". *Australian and New Zealand Journal of Obstetrics and Gynecology*, 1979, 19(4), 235.
- Sampson J. A.: "Perforating hemorrhagic (chocolate) cysts of the ovary". *Archives of Surgery*, 1921, 3, 245.

---

Address reprint requests to:  
A. DARZI  
Central Middlesex Hospital  
Park Royal  
London NW10, 7NS (United Kingdom)