

## Catamenial pleural pain

K. Horsfield

*Catamenial pleural pain. K. Horsfield*

**ABSTRACT:** A case of recurrent pleural pain without pneumothorax, thought to be due to pulmonary endometriosis, is presented. The pain was associated with the menstrual periods, remitted when the patient was sterilised, recurred when she was given oestrogens, and finally disappeared when the oestrogen was stopped. The presentation of pulmonary endometriosis, with pleural pain but no pneumothorax, should be added to those previously described in the literature.

*Eur Respir J., 1989, 2, 1013-1014.*

King Edward VII Hospital, Midhurst, West Sussex, GU29 OBL, UK.

Correspondence: K. Horsfield, King Edward VII Hospital, Midhurst, West Sussex, GU29 OBL, U.K.

Keywords: Menopause; oestrogens, pulmonary endometriosis.

Received: 2nd February 1989; accepted for publication 5th May 1989.

Thoracic endometriosis is an uncommon condition, which may present in various ways. The clinical features have been reviewed by several authors [1-9], most comprehensively by HIBBARD *et al* [10]. They classified the modes of clinical presentation into four groups: recurrent pneumothorax; recurrent haemoptysis; recurrent haemothorax; and asymptomatic, discovered incidentally on a chest radiograph. The case reported here presented primarily with recurrent lower chest pain, although two minor episodes of haemoptysis did occur. This mode of presentation has only once been described in the literature [10], and even then it was classified in the pneumothorax group.

### Case report

A 43 year old nurse, para three, was admitted with pleural pain of acute onset in the left lower chest. The pain was severe and required pethidine to control it. There were no abnormal physical signs, and the pain settled down over two days. She had had a left partial nephrectomy ten years previously for a renal calculus which was removed. The pain had recurred on many occasions, but never during pregnancy. Five intravenous pyelograms over the years failed to show any evidence of recurrence of renal calculus. As the patient was a nurse, she had often been admitted while on duty and given pethidine. A year later, during another attack of pleuritic pain, she had one haemoptysis, and crepitations were heard anteriorly in the left lower chest. This was the only occasion on which any abnormal physical sign in the chest was detected. A year later she had a similar attack, also with one haemoptysis. Over the following years, further attacks of pain occurred, usually requiring pethidine, but settling rapidly. The chest radiograph was always normal, as were several ventilation/perfusion scans.

When aged 50, during another attack, it emerged that the symptoms were frequently, but not invariably, associated with her menstrual periods. She was referred to a gynaecologist who found no clinical evidence of pelvic endometriosis. She then developed symptoms of gall stones, and these having been confirmed, she underwent cholecystectomy. The opportunity was taken to search for abdominal and pelvic endometriosis, but none was found. Following two further attacks of pain, it was decided to induce artificial menopause with radiation. She remained well for three months, after which time she developed postmenopausal symptoms. For these her general practitioner gave her an oestrogen preparation and six days later she had a further attack of pain. The oestrogen therapy was discontinued and the pain ceased. Now, four years later, she has remained free from pain, and her post menopausal symptoms are moderately well controlled with clonidine.

### Discussion

Although induction of menopause was the treatment used in this case, danazol, which suppresses pituitary gonadotrophin, may be an effective alternative, and can be used as a therapeutic test. However, about 85% of women on this drug develop major side effects [11]. A more recent alternative is nafarelin, which is claimed to produce fewer side effects [12].

The diagnosis of endometriosis in this patient remains unproven. There was no good indication for performing a thoracotomy, which would have been unjustified just to search for endometriosis. In any case, in the majority of cases described in the literature and presenting without pneumo- or haemothorax, no endometriosis has been found. The evidence in favour of endometriosis in this patient is: recurrent symptoms over many years in association with the menstrual periods; the

occurrence of haemoptysis on two occasions; the immediate cessation of symptoms on inducing menopause; their recurrence within six days of starting oestrogens; the immediate and total cessation of the symptoms on stopping the oestrogens.

In their review of the literature HIBBARD *et al* [10] found that pelvic endometriosis was not always present, having been found in none of those presenting with haemoptysis, half of those with pneumothorax, and all of those with haemothorax. Pulmonary endometriosis was found predominantly in those presenting with haemothorax, but three histologically proven cases of bronchial endometriosis with haemothorax were also described. HIBBARD *et al.* added two further cases of their own, one of which presented with pleural pain. They included it in their pneumothorax group, even though no pneumothorax was found, as no case presenting only with pleural pain had previously been described. Taking their patient and the one reported here together, it appears that recurrent pleural pain without pneumothorax should be added to the modes of presentation of pulmonary endometriosis.

#### References

1. Lattes R, Shepard F, Tovell H, Wylie R. – A clinical and pathologic study of endometriosis of the lung. *Surg Gynecol Obstet*, 1956, 103, 552–558.
2. Maurer ER, Schaal JA, Mendez FL. – Chronic recurring spontaneous pneumothorax due to endometriosis of the diaphragm. *JAMA*, 1958, 168, 2013–2014.
3. Mobbs GA, Pfanner DW. – Endometriosis of the lung. *Lancet*, 1963, i, 472–474.
4. Kovarik JL, Toll GD. – Thoracic endometriosis with recurrent spontaneous pneumothorax. *JAMA*, 1966, 196, 595–597.
5. Crutcher RR, Waltuch TL, Blue ME. – Recurring spontaneous pneumothorax associated with menstruation. *J Thorac Cardiovasc Surg*, 1967, 54, 599–602.
6. Davies R. – Recurring spontaneous pneumothorax concomitant with menstruation. *Thorax*, 1968, 23, 370–373.
7. Jelihovsky T, Grant AF. – Endometriosis of the lung. *Thorax*, 1968, 23, 434–437.
8. British Medical Journal. – Spontaneous pneumothorax and menstruation. *BMJ*, Leading article, 1969, i, 269–270.
9. Van Mulders A, Deneffe G, Demedts M. – Recurring spontaneous pneumothorax in association with pleural endometriosis. *Acta Clin Belg*, 1983, 38, 381–383.
10. Hibbard LT, Schumann WR, Goldstein GE. – Thoracic endometriosis: A review and report of two cases. *Am J Obs Gyn*, 1981, 140, 227–232.
11. Barbieri RL, Evans S, Kistner RW. – Danazol in the treatment of endometriosis: analysis of 100 cases with a 4-year follow-up. *Fertil Steril*, 1982, 37, 737–746.
12. Henzl MR, Corson SL, Moghissi K, Buttram VC, Berqvist C, Jacobson J. – Administration of nasal nafarelin as compared with oral danazol for endometriosis. *N Engl J Med*, 1988, 318, 485–489.

#### *Douleur pleurale cataméniale. K. Horsfield*

RÉSUMÉ: Présentation d'une observation de douleur pleurale récurrente sans pneumothorax, attribuée à une endométriose pleurale. La douleur était associée à la période menstruelle, a régressé après stérilisation de la patiente, a rechuté après administration d'oestrogènes, pour disparaître finalement après l'arrêt de l'oestrogénothérapie. Cette forme de présentation de l'endométriose pleurale associée à une douleur pleurale mais sans pneumothorax, devrait être ajoutée aux autres formes décrites dans la littérature. *Eur Respir J.*, 1989, 2, 1013–1014.