

## Pelvic phleboliths and thrombosis

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**Summary.** Pelvic phleboliths are common and are generally considered to be harmless. Two cases are described where pelvic phleboliths were associated with thrombosis.

**Key words:** Pelvic phleboliths thrombosis

### Introduction

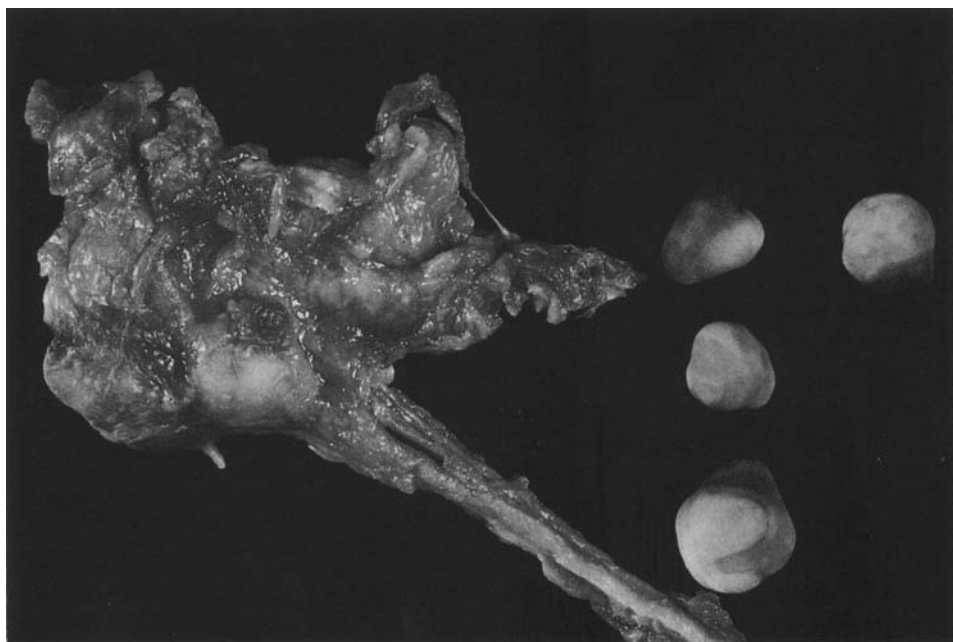
Pelvic phleboliths are calcified thrombi within the gonadal veins and are often seen as incidental findings in pelvic x-rays. Their formation has been linked to a deficiency of dietary fibre, together with an increase in clotting tendency, and they have been detected in up to 66% of English populations studied (Burkitt et al. 1985). They are generally considered to be harmless. This report describes two cases in which phleboliths may have been responsible for disturbances in blood flow.

### Case reports

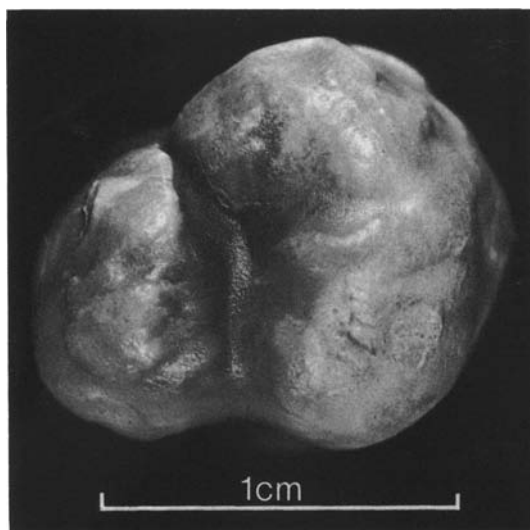
*Case 1.* A 62 year old female presented to a department of Gynaecology with abdominal pain. At laparotomy, an infarcted left ovary was removed together with left fallopian tube and associated blood vessels. There was no evidence of torsion at the time of operation. The patient made a full recovery. Histological examination of the ovary showed the features of venous infarction. Several phleboliths, largest 4 mm diameter, were found within the pampiniform plexuses of the left ovarian vein with associated thrombus. One phlebolith showed ossification. No reason for the infarction of the ovary was apparent on histology, apart from the presence of phleboliths.

*Case 2.* An 84 year old female was admitted to a department of Geriatric Medicine with a right ilio-femoral thrombosis. A mass was clinically palpable in the pelvis and she was thought to have an ovarian neoplasm. She had had a pelvic operation 71 years previously for an unknown complaint. She had a large fatal haematemesis before the mass in the pelvis could be investigated.

At necropsy, there was a swollen right lower limb. Thrombus was present within the right side of the inferior vena cava and extended distally into the right common iliac vein.



**Fig. 1.** The collection of phleboliths and left ovarian vein as described in case 2. Some of the phleboliths have been removed to one side



**Fig. 2.** One phlebolith. Note the cusp-like structures

Examination of the pelvis showed uterus, tubes and ovaries to be absent. Overlying the vena cava was a  $70 \times 40 \times 40$  mm hard collection of phleboliths lying in the ectatic pampiniform plexuses of the fully patent left ovarian vein. Twenty phleboliths, varying in diameter from 8 to 19 mm, were present (see Fig. 1). Some of these phleboliths had a superficial resemblance to human teeth (Fig. 2) and the collection was incorrectly diagnosed as an ovarian teratoma

by several experienced pathologists. This collection had to be dissected free from the vena cava and the impression was given that these phleboliths may have been producing extrinsic pressure on this vessel.

### **Comment**

In case 1, phleboliths appear to have compromised the venous drainage of the left ovary to such an extent that infarction resulted. In case 2, extrinsic pressure on the inferior vena cava by a collection of phleboliths is thought to be the reason for thrombosis within the vessel.

Pelvic phleboliths are common in developed communities and their geographical distribution appears to be similar to that of deep vein thrombosis (Burkitt et al. 1977). These two conditions are directly linked in case 2. Symptoms due to pelvic phleboliths do not appear to have been described previously. Several cases of visual deterioration, associated with orbital phleboliths, have, however, been described (Lloyd 1965). The two cases reported here suggest that, rarely, pelvic phleboliths may not be entirely innocuous.

### **References**

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