The modern treatment of Bartholin cyst and abscess

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IN THE PAST, the method of treatment recommended in most gynaecological text-books for a Bartholin's cyst was primary excision, and an acute abscess by incision and drainage, followed later by excision. Difficulties are often encountered in these conventional methods and complications following such procedures are not uncommon. It is therefore not surprising that an improved method of treatment has evolved in recent years.

The first account of the marsupialisation operation was given by Davies in 1948. Modifications of the surgical technique were described by Jacobson in 1950 and Wilder in 1955. The first account to appear in British literature was that by Blakey in 1958, and more recently by Siganos in 1961. Long-term results were reported by Blakey et al, (1966) and Mathews (1966) confirming that results were satisfactory following this new technique.

Material and Methods

The Bartholin cyst is a dilation of the 2-centimetre long duct due to blockage at its distal end where it opens into the vagina. The aim of the operation is to construct a new mucocutaneous junction between the cyst wall and the labial skin and to place it in approximately the normal position so that the secretion will be released on the vulva. The same operation is done whether the cyst is infected or not, ruptured or recurrent.

The technique employed is essentially similar to Blakey's (1958). A vertical incision 2 cm. long is made directly into the cyst as in Fig. 1. The lining of the cyst is sutured to each adjacent cut skin margin, using about six interrupted catgut sutures, vide Fig. 2.

During a three-year period at Saint Mary's Hospital, Manchester, and at Whittington Hospital, London, the author marsupialised 18 Bartholin cysts and seven abscesses. The results were satisfactory. No complications were encountered and no recurrence during the short follow-up.

Technique and Results of Various Authors

Davies (1948) was the first to describe this simple method for restoring the Bartholin cyst to function. He treated 25 Bartholin cysts by incision under local anaesthesia. The cavity was packed with iodoform gauze which was changed biweekly for three weeks to maintain patent the new ostium in the duct. Occasionally, the ostium contracted and it had to be dilated up with a blunt instrument.

In 1950, Jacobson reported on the results of operating on 19 Bartholin cysts, five of which were recurrent. The cyst was incised and the cut edge of the cyst was sutured to that of the labia forming a new stoma for the gland. These results were excellent.

While Davies and Jacobson treated the Bartholin cyst only, Wilder in 1955 described a modified

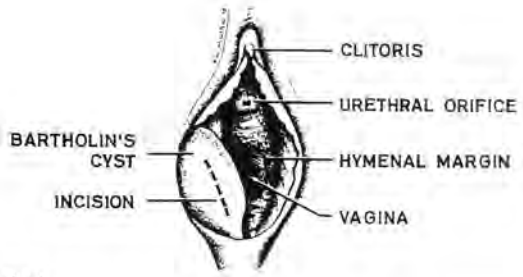

Fig. 1

LINEAR INCISION MADE JUST OUTSIDE HYMENAL RING.

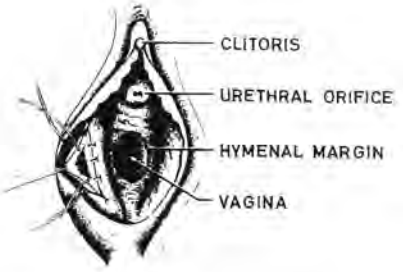

Fig. 2

THE EDGES OF CYST WALL ARE SUTURED TO THE SURROUNDING SKIN AND MUCOUS MEMBRANE.

method whereby the cyst and the abscess were treated similarly under local anaesthesia. An incision about 2 cm. long was made over the cyst wall or abscess. The cut cyst edge was sutured to the adjacent skin edge with four or five interrupted silk sutures which were removed after three weeks. An iodoform drain was inserted for a week. He treated 48 abscesses and 32 cysts with good results.

In 1956, Tancer et al reported on marsupialisation of 22 Bartholin cysts without a single recurrence. A linear incision was made into the cyst cavity. An elliptical portion of the cyst lining was excised and a stoma 1 to 1.5 cm. in diameter created.

Blakey (1958) described a slightly modified technique for treating the cyst and the abscess, as indicated above under "Material and Methods." After-care consisted of simple hygiene and daily baths. The operation may be done under general or regional anaesthesia, as an outpatient procedure, and may even be performed during pregnancy. He operated upon 14 cysts and abscesses and the results were satisfactory.

Lowrie (1959) modified Jacobson's method by packing the cavity with a small piece of rubber drain which was held by a suture. He treated 60 cysts and abscesses and "failure was relatively unknown."

In 1960, Jacobson further reported on 140 patients with 152 cysts which were marsupialised, using the same technique he described in 1950. "The results were excellent in all cases."

Oliphant et al, (1960) reviewed 380 cases of cysts and abscesses which were treated by various techniques such as medical treatment, needle aspiration, incision and drainage, and marsupialisation. Marsupilaisation was followed by the lowest recurrence rate.

In 1961, Siganos reported on ten cases of Bartholin cysts and two cases of Bartholin abscesses treated by marsupialisation with complete success.

Johnson (1961) described marsupialisation of the Bartholin cyst under pudendal anaesthesia. The technique was similar to Blakey's (1958). He operated upon 45 patients with only one known recurrence.

The long-term results after marsupialisation of cysts and abscesses were reported by Blakey et al (1966) and by Mathews (1966). Blakey et al reported two recurrences, following marsupialisation of 29 abscesses and 21 cysts, and after a follow-up of two to eight years. In Mathews' series, recurrences are known to have occurred after 15 (13 per cent) of 115 marsupialisation operations.

Disadvantages of Excision

Excision of the cyst is not a simple operation and it should be done in hospital. Haemorrhage and haemotoma formations are common because of the vascularity in this area of the vulva. A large depression may be left on the vulva following excision (Crossen and Crossen, 1948).

In the excision operation, the perineum is deprived of an important secretion. Jacobson (1950) described a woman who had both glands removed; three months later, she complained of dyspareunia and pruritus vulva.

Damage to surrounding structures can be serious complications. Te Linde (1962) stated that the rectum may be damaged during excision of the cyst, and one may encounter troublesome bleeding. Reich and Nechtow (1957) commented that "excision appears to be the bloodiest procedure in gynaecological surgery," while Wilder (1955) had seen many

cases requiring blood transfusions with prolonged stay in hospital.

The recurrence rate following the excision operation is high, and this is the experience of most authors. Blakey (1958) commented that recurrence may follow excision of the cyst if the gland is left behind.

Although Novak (1951) did not favour the marsupialisation operation, he agreed that tender, irritating scars may follow the excision operation.

Oliphant (1960) objected to the excision operation because it could be time-consuming, and it could not be employed on the acute abscess.

The excision operation is not feasible when the cyst has ruptured through or under the skin. If excision had failed then scarring and loss of anatomical landmarks would render succeeding operations more difficult.

Advantages of Marsupialisation

These may be summarised below:

(1) The procedure is simple.
(2) Operating time is short.
(3) Blood loss is minimal.
(4) The mucous secreting function of the gland is preserved.
(5) Little risk of injuries to surrounding structures.
(6) Little or no post-operative discomfort or morbidity.
(7) No tender post-operative scar.
(8) The procedure is applicable to both cysts and abscesses.
(9) Hospital stay is shortened.

Conclusion

In view of the disadvantages from excision of the Bartholin cyst compared to the advantages of the marsupialisation operation, there is a recent trend towards adopting the marsupialisation to technique for treating the Bartholin cyst and abscess. The procedure is simple and can be easily mastered by junior resident doctors. Complications and recurrence are minimal. Hence this modern technique should supercede the older methods of treating Bartholin cysts and abscesses.

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