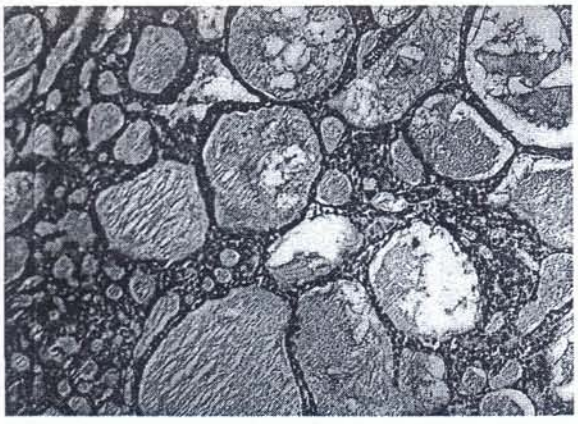

Figure 1. Adenoid cystic carcinoma with typical cribriform pattern. H&E×70.

Collagen type IV reactivity was present in the basement membrane. Some neoplastic cells are S-100 protein, actin and vimentin reactivity positive. The tumour cells were negative with chromogranin A. Analysis of DNA index and S-phase by flow cytometry showed a normal diploid pattern and very a high percentage of cells in the S-phase. Residual Bartholin's gland was identified. The tumour did not reach to the margins of the surgical resection. No metastases were observed in the pelvic and inguinal lymph nodes (n=45). There was no evidence of recurrence 6 months postoperatively.

Discussion

Primary carcinoma of Bartholin's gland is a rare neoplasm. ACCs constitute 10 per cent of malignant tumours of Bartholin's gland (Rosenberg *et al.*, 1989).

Chamlian and Taylor, from the Armed Forces Institute of Pathology, established diagnostic criteria in 1971: (1) areas of apparent transition from normal elements to neoplasia found on histology; (2) the tumour involving Bartholin's gland is histologically compatible with the origin from the Bartholin's gland; and (3) there is no evidence of a primary tumour elsewhere.

The patient presented with a palpable mass that was painful. Symptoms of pain or burning are related to early perineural involvement. Other symptoms are bleeding, dyspareunia, pruritus or drainage from an abscess. The histogenesis of ACC is still contraversial. The tumour is suspected to be of myoepithelial origin. Ultrastructurally both myoepithelial-like and ductal cells have been demonstrated. Immunohistochemical stains can be used in order to distinguish myoepithelial cells. In our study cytokeratin and S-100 protein and actin were demonstrated in tumour cells. There was vimentin positivity, supporting a mesenchymal origin. Tsukahara *et al.* (1991) speculated that reserve cells located in the intercalated small ducts of Bartholin's gland may have the potential to differentiate into two cell types, myoepithelial and luminary cells, the former forming pseudocysts.

There was only one other study in the literature of flow cytometry in adenoid cystic carcinoma of Bartholin's gland which also revealed a diploid histogram (Rosenberg *et al.*, 1989).

The Bartholin's gland ACC tends to produce local recurrences and distant metastases only many years after orginal diagnosis and treatment (Milchgrub *et al.*, 1994). The lungs and bone are two common sites of these late metastases. Radical vulvectomy and bilateral or ipsilateral inguinal and/or pelvic lymhadenectomy are usually performed in the treatment. The effectiveness of operative irradiation and/or chemotherapy has not been established. Long-term follow-up is necessary.

References

Bernstein S.G., Voet R.L., Lifshitz S. and Buchsbaum H.J. (1983) Adenoid cystic carcinoma of Bartholin's gland. *American Journal of Obstetrics and Gynecology*, **147**, 385–390.

Chapman G.W., Benda J. and Lifshitz S. (1985) Adenoid cystic carcinoma of the vulva with lung metastases: a case report. *Journal of Reproductive Medicine*, **30**, 217–220.

Copeland L.J., Sneige N., Gershenson D.M., Saul P.B., Stringer C.A. and Seski J.A. (1986) Adenoid cystic carcinoma of Bartholin's gland. *Obstetrics and Gynecology*, **67**, 115–120.

De Pasquale S.E., Mc Guinnes T.D., Mangan C.E., Husson M. and Woodland M.B. (1996) Adenoid cystic carcinoma of Bartholin's gland: a review of literature and report of a patient. *Gynecologic Oncology*, **61**, 122–125.

Milchgrub S., Wiley E.L., Vuitch F. and Albores-Saavedra J. (1994) The tubular variant of adenoid cystic carcinoma of Bartholin's gland. *American Journal of Clinical Pathology*, **101**, 204–208.

Morita Y., Hikage S. and Ogino M. (1996) Adenoid cystic carcinoma of Bartholin's gland: a case report. *International Journal of Gynaecology and Obstetrics*, **54**, 279–280.

Rosenberg P., Simonsen E. and Risberg B. (1989) Adenoid cystic carcinoma of Bartholin's gland: a report of five new cases treated with surgery and radiotherapy. *Gynecologic Oncology*, **34**, 145–147.

Tsukahara Y., Mori A., Fukuta T., Katsuyama T. and Yamagami O. (1991) Adenoid cystic carcinoma of Bartholin's gland. A clinical immunohistochemical and ultrastructural study of a case with regard to its histogenesis. *Gynecologic and Obstetric Investigation*, **31**, 110–113.

Rectovaginal and vesicovaginal communications following coital injury

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Introduction

Communications between the vagina and rectum and/or bladder have become a rarity in many parts of the developed world, except in oncological practice. However, the prevalence in the developing countries has been maintained particularly as a consequence of mismanaged labours (Kelly, 1992; Inimgba *et al.*, 1999), and gynaecological injuries from unsafe abortion, genital infections and coital injuries.

Coital injury presents commonly to gynaecological care secondary to uncontrollable haemorrhage from traumatized vaginal vessels.

A case of injury involving the vagina walls and communicating with the bladder and rectum is presented here to highlight the fact that morbidity from coitus need not necessarily be limited to haemorrhage.

Case report

Miss O.J., a 13-year-old premenarcheal female primary school pupil was seen as an emergency with a 6-hour history of profuse vaginal bleeding.

A history of trauma secondary to a road traffic accident was volunteered initially by the mother, who strongly denied any sexual assault. The patient felt dizzy but did not faint. There was involuntary passage of urine and formed stool per vaginam.

She was the fourth of five children of her mother who was in a polygamous union. The patient engages in street trading of food items in the evenings to supplement the family income. Physical examination revealed an anxious young girl. She was severely pale (packed cell volume 18 per cent), was not febrile and not jaundiced.

There was no visible abrasion or laceration on her body. The pulse

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rate was 120 beats per minute, regular and of small volume. The blood pressure was 100/70 mmHg.

Pelvic examination revealed an intact but bloodstained vulva. The vagina admitted only the index finger with ease. Ragged vaginal wall lacerations were felt anteriorly and posteriorly. Pain precluded a more detailed examination.

The rectal examination revealed huge blood clots extruding from the anus, but the anal sphincter and mucosa were intact. The rectovaginal communication was confirmed to be situated about 4 cm from the anal margin.

A provisional diagnosis of combined vaginal communications secondary to a road traffic accident was made, but a coital injury was not ruled out. She was resuscitated with crystalloid solutions while 2 units of blood were grouped and cross-matched for her. She was reviewed by the paediatric surgeon and the urologist with a decision to examine again under anaesthesia and repair the lacerations. Intramuscular tetanus toxoid, antitetanus serum and intravenous broad spectrum antibiotics were administered. Further questioning of the mother confirmed that the girl had been actually sexually assaulted.

At surgery, examination revealed an intact vulva and perineum. A posterior vaginal fornix aspirate and swab were taken. There was a rectovaginal communication about 4 cm in length situated about 4 cm from the introitus. The midvaginal vesicovaginal communication measured about 3 cm. A bucket handle laceration was noted at the top of the posterior vaginal wall. The cervix and the uterus were appropriate for the patient's age.

A right mediolateral episiotomy was performed to improve access. The bladder wall was repaired in two layers using 00 polyglactin sutures. A dye instillation test per urethram showed no leakage. The rectal wall was also repaired in two layers using the same material. The vaginal wall lacerations were repaired in two layers using 0 polyglactin. Finally, the episiotomy was repaired.

The postoperative period was uneventful. Her antibiotic therapy was continued. Intramuscular pentazocine and later oral paracetamol were given. She had spontaneous bowel motion on the second postoperative day. Continuous bladder drainage was maintained for 10 days. She had extensive psychotherapy and was discharged home on the 11th day with a clinic appointment for 4 weeks hence.

Discussion

Coital injury may not be restricted to the genital organs alone. Extragenital coital injuries have been reported previously (Davidson *et al.*, 1993; Sivalingam and Rajesvaran, 1966; It is thus necessary to have a high index of suspicion to identify injury to contiguous structures that are best repaired during the primary surgery. This was facilitated by the detailed examination under anaesthesia carried out in this patient.

Forced intercourse especially in premenarcheal girls is capable of extensive injury. These may be due to true peno-vaginal disproportion, absence of lubrication or lack of the normal sexual response with tensing of the cul-de-sac. In addition the force exerted by the male is important.

Primary layered closure of both defects was carried out on account of the freshness of the injuries and because the tissues were still healthy and supple. Postoperative continuous bladder drainage was necessary to rest the bladder and allow healing to occur. Stool softeners were prescribed to prevent early tension on the repaired rectal wall. Broad spectrum antibiotics were prescribed to prevent bacterial/chlamydial sexually transmissible diseases, although the more serious infections such as hepatitis and HIV/AIDS cannot be prevented in this manner.

Being premenarcheal, it was not considered necessary to give Miss O.J. contraception. Nevertheless, the mother and the girl were educated about the symptoms of pregnancy and told to report as early as possible.

Psychosexual problems later in life such as frigidity, vaginismus and marital disharmony complicate childhood forced intercourse. To prevent or at least minimise the occurrence of these complications, intense psychotherapy was initiated while she was in the hospital and this will be continued when seen in the outpatient clinic.

References

Davidson P.G., Ozuner G. and Silich R.J. (1993) Hemoperitoneum as a result of coital injury to the liver: a case report. *Journal of Reproductive Medicine*, **38**, 472–474.

Inimgba N.M., Okpani A.O.U. and John C.T. (1999) Vesico-vaginal fistula in Port Harcourt. *Tropical Journal of Obstetrics and Gynaecology*, **16**, 49–51.

Kelly J. (1992) Vesico-vaginal and recto-vaginal fistula. *Journal of the Royal Society of Medicine*, **85**, 257–258.

Sivalingam N. and Rajesvaran D. (1996) Coital Injury requiring internal iliac artery ligation. Singapore *Medical Journal*, **37**, 547–548.

Unicornuate uterus with a rudimentary horn: an unusual presentation

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Case report

A 21-year-old nulliparous woman presented with a 24-month history of recurrent left iliac fossa pain, which was non-cyclical in nature. There were no associated bladder or bowel symptoms. The pain was severe enough to disrupt her work and social life. She complained of moderate dysmenorrhoea.

Because of her long-standing history of pain, she had numerous hospital admissions. She had also had two diagnostic laparoscopies in 1 year. The findings of the first laparoscopy were that of double uterus with congestion in the broad ligament on the left side. Despite analgesia the pain persisted, therefore a second laparoscopy was performed by a different gynaecologist, but no cause for pain was identified. Subsequently several general surgeons, two other gynaecologists, one orthopaedic surgeon, a urologist, a physiotherapist, a rheumatologist and an anaesthetist with an interest in chronic pain all saw her, but to no avail. During the many referrals she had a normal intravenous urogram, a renogram and a bone scan. However, the pain eluded diagnosis. She was prescribed Tramadol, Pethidine, Diazepam and the combined oral contraceptive pill for her pain, at different junctures, with minimal effect.

Abdominal examination revealed mild tenderness in the left iliac fossa and tenderness over the left side of the uterus. Ultrasound scan of the pelvis revealed an anteverted uterus and there was a mass measuring 2·3×0·8×4·13 cm of mixed echogenicity, closely associated with the lateral wall of the uterus on the left side. The right ovary was seen but the left ovary was not identified separately. Another elective laparoscopy was performed. This revealed an abnormal shaped uterine fundus; it was not typical of a bicornuate uterus, as there was no median raphe. Both tubes and ovaries looked normal. A MRI scan was arranged which raised the possibility of a non-communicating rudimentary uterine horn on the left side.

A laparotomy was performed which confirmed the findings of a non-communicating rudimentary uterine horn on the left side. An incision with needlepoint diathermy was made into the uterine horn, which drained thick chocolate material. The rudimentary uterine horn was excised completely. The main uterine cavity was not entered. Dextran 70 was instilled to prevent postoperative adhesions. The patient had an uneventful postoperative period. She remained pain-free at follow-up 6 weeks later.

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