

FIG 1: Abdominal radiograph demonstrating radio-opacities consistent with distended uterine horns



FIG 2: Opened uterus showing adenocarcinomas on the luminal surface

epithelial cells were uniform in appearance, some with degenerate, pyknotic nuclei which stained deeply basophilic.

Abdominal radiographs revealed two large soft-tissue radioopacities, one each side the abdomen (Fig 1). Their position was consistent with that of enlarged uterine horns. Surrounding viscera were grossly displaced. On exploratory laparotomy the uterus was observed to be very enlarged; the horns were 10 cm in diameter and fluid-filled. The uterine arteries were abnormally large and a solid, soft-tissue tumour was present on the left ovary. All other organs were normal in appearance.

The treatment of this animal involved ovariohysterectomy. Anaesthesia was induced using a combination of fentanyl and fluanisone (Hypnorm; Janssen) and maintained using isofluorane and oxygen. The rabbit was positioned in dorsal recumbency and a ventral midline incision was made cranial to the pelvic brim. The uterus was exteriorised. The ovarian arteries were identified and ligated using catgut ligatures. The uterine arteries were ligated with double catgut ligatures. The uterus was excised at the cervix. The cervical stump was oversewn using polyglactin 910 (Vicryl; Ethicon) sutures. Before closure, the abdominal cavity was irrigated with normal saline solution to reduce the risk of peritonitis. Abdominal closure was effected using Vicryl sutures in the linea alba and subcutaneous fat; nylon simple interrupted sutures were used to close the skin.

The postoperative care of the patient included fluid therapy, antimicrobials and anti-inflammatory medication. Fluid therapy consisted of intraperitoneal and subcutaneous glucose-saline solution to prevent the onset of hypovolaemic shock. Trimethoprim-sulphonamide (Tribrissen 24 per cent; Mallinckrodt) was given by subcutaneous injection at 0.2 ml/3 kg once a day for four days. Ketoprofen (Ketofen; Rhône-Mérieux) was administered subcutaneously postoperatively.

The surgery took 35 minutes in total. The rabbit was in sternal recumbency 30 minutes postoperatively and was active and eating within two hours. Two weeks postoperatively, the skin sutures were removed and the animal made a full recovery.

The uterus was opened once the surgery was completed to investigate its contents. Two large tumours were present (Fig 2).

The tumours were yellow in colour with necrotic centres. The largest tumour was on the left side and was 5 cm in diameter while the smaller tumour was more centrally located in the uterus and was 2.5 cm in diameter. Both tumours were firm on palpation.

Samples of each tumour were sent for histopathological examination. The samples revealed multiple lobules of neoplastic epithelial cells forming irregular acini, some of which contained mucin. Some tumour cells had invaded the muscle layers but not the serosa so the prognosis was good (transcoelomic spread was therefore unlikely). The conclusive diagnosis was that of a uterine adenocarcinoma.

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Nasal mite of dogs *Pneumonyssus* (*Pneumonyssoides*) caninum in Iran

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THE nasal mite *Pneumonyssus* (*Pneumonyssoides*) caninum lives in the nasal passages and nasal sinuses of dogs. It has been found in the USA, Hawaii, Australia, the Republic of South Africa, Norway, Sweden, Finland, Canada and Spain (Christensson and Rehbinder 1971, Tharaldsen and Groendalen 1978, Soulsby 1982, Brandt 1988, Olmeda-Garcia and others 1991, Saari and others 1992, Christensson and others 1993). Its life history is completed in the nasal passages and sinuses of the host. Occasionally mites appear in the external nares and this location would appear to be a favourable position for transfer between hosts (Georgi and Georgi 1992).

Dogs of any age, breed or sex may be affected but the effects are generally not serious and are usually confined to reddening of the mucosa, sneezing, shaking of the head and rubbing the nose. It sometimes causes chronic sneezing and epistaxis (Bowman 1995). *P caninum* may cause sinusitis leading to symptoms of central nervous disorders (Christensson and Rehbinder 1971).

A seven-year-old male large breed dog with a history of cutaneous leishmaniasis was presented to the University of Mashhad Veterinary Teaching Hospital. The dog was in poor bodily condition and very emaciated. On clinical examination, it had a heart rate of 86 beats/min, increased respiratory rate, mucoid nasal discharge and a cutaneous lesion on the right forelimb.

Evaluation of a haemogram revealed no abnormalities. The dog was hospitalised, but despite supportive therapy its condition continued to deteriorate and it was euthanased.

At postmortem examination, very fine oval, yellow-white parasites were found crawling over the nasal epithelium and around the external nares. After saggital sectioning, moderate numbers of parasites were seen in the nasal passages and paranasal sinuses.

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