CASE REPORT

Hidradenoma papilliferum: an unusual benign perianal tumour

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SUMMARY

Hidradenoma papilliferum is an uncommon benign tumour that is located in the anogenital region of middle-aged women. They are usually only diagnosed after excision and are thought to arise from anogenital mammary-like glands. We present the case of a young woman who noticed a slow growing perianal lump which caused minimal symptoms.

BACKGROUND

Hidradenoma papilliferum (HP) is an uncommon benign tumour that is located mostly in the vulva and less often in the anal area.^{1,2} They occur most often in middle-aged Caucasian women.^{1,2}

The histopathology demonstrates branching and anastomosing tubules that are composed of columnar cells with focal decapitation secretion and cuboidal myoepithelial cells.³ The cells demonstrate receptors for oestrogen and progesterone.^{4,5}

Previously due to their histology, HP was once considered to arise from apocrine sweat glands.⁶ However, due to their anatomical distribution pattern and histological structure, more recent studies have reported that HP may have arisen from anogenital mammary-like glands (MLGs).^{2,3,7} Moreover, both the epithelium and stroma undergo cyclic changes with the menstrual cycle akin to MLG.⁷

Because they are rare and usually asymptomatic, they present a diagnostic challenge for a general surgeon and are only diagnosed after the tumour has been removed.

Figure 2 An H&E stained section (high power magnification).

We present a case of a 31-year-old white woman who had a slowly growing painless lump in the perianal region.

CASE PRESENTATION

The patient was a 31-year-old woman who presented with a perianal mass. The patient noticed the lump slowly growing over a period of 1 year. Apart from being noticed on palpation, the mass caused no symptoms. There was no history of pain, bleeding, tenderness or any associated anorectal symptoms of itch, tenesmus or incontinence. There was no history of altered bowel habits, loss of weight or significant background medical/surgical history or family history. She was an exsmoker. On examination, in the left lateral perianal position, a 9×5 mm pale skin-coloured opalescent hemispheroid mass was located 1.5 cm from the anal verge. There was no associated inflammation or signs of fistula.

INVESTIGATIONS

Colonoscopy was performed to exclude entities such as colorectal malignancy and the malignant seeding of a fistula tract.

H&E stained sections (figures 1 and 2) showed a 10×6×5 mm benign-appearing tumour with both papillary and glandular areas. The papillary areas showed an arborising trabecular pattern. The glandular areas varied in size and were lined by an inner layer of tall columnar epithelial cells with pale eosinophilic cytoplasm and cytoplasmic projections on the surface, with an underlying myoepithelial layer. Immunohistochemical staining showed the presence of both oestrogen (figure 3) and progesterone receptors (figure 4).

Figure 1 An H&E stained section (low power magnification).

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Figure 3 Immunohistochemical staining for oestrogen receptor.

A diagnosis of HP was made. The patient made a good postoperative recovery and was well at follow-up. No further treatment was required.

DIFFERENTIAL DIAGNOSIS

The clinical differential diagnoses of HP is based on the histology of an anal mass which does not fit the usual diagnosis, including thrombosed external haemorrhoids, perianal abscess, perianal warts, lipoma or sebaceous cysts.⁸

Other anogenital MLG tumours may be seen here, including fibroadenoma, phyllodes tumour, fibrocystic change, syringocystadenoma papilliferum, ductal carcinoma in situ, adenocarcinoma, lobular carcinoma and tubulolobular carcinoma.⁹

The diagnosis is usually histological, and the clinical suspicion leads to both the diagnosis and management.

TREATMENT

The perianal mass was excised with a 2 mm elliptical margin. Management of HP is local excision. Incomplete excision is associated with local recurrence.¹⁰

Figure 4 Immunohistochemical staining for progesterone receptor.

OUTCOME AND FOLLOW-UP

The prognosis of HP is very good. As the margins of excision are clear, there should be no local recurrence. No follow-up is required; however, the patient was advised to return if a recurrent nodule is noted.

DISCUSSION

HP is usually asymptomatic; however, it can cause bleeding, ulceration and itching. It usually presents as an intradermal or subcutaneous firm round nodule measuring less than 1 cm.¹⁰

HP has been reported by Konstantinova *et al* as occurring 72% in the vulva, 14% in the perianal region and 4% in the perineum.¹ Malignant transformation of HP is rare.

Any perianal tumour that does not fit in clinically with the common diagnoses in this area, such as haemorrhoids, skin tags, perianal thromboses, epidermal cyst and warts, requires surgical excision or at a minimum a diagnostic biopsy to confirm its pathology.

Learning points

- ▶ Hidradenoma papilliferum is a rare benign tumour of the mammary-like gland which rarely involves the anus.
- ▶ Any perianal tumour should be excised or at least biopsied if it does not have the typical appearance of the most common masses arising on this site (haemorrhoids, skin tags, perianal thromboses, epidermal cyst, wart).

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