'Delivery' of an anal angiofibroma

Richard B. Kurzel and Sonia Enriquez

Department of Obstetrics and Gynecology, St. Louis University School of Medicine, St. Mary's Health Center, 6420 Clayton Road, St. Louis, Missouri 63117, USA.

Summary: A case is presented of an anal angiofibroma. This is the first report of this tumour in a pregnant patient. The tumour appeared to grow in size during the pregnancy.

Introduction

An angiofibroma of the anal canal was removed from a pregnant patient in labour, after having prolapsed with a Valsalva manoeuvre. This tumour appeared to have grown in size during the pregnancy. To our knowledge this is the first report describing this tumour during pregnancy.

Case report

A 25 year old black female (G₃P₁), a recent immigrant from Nigeria, was admitted in active labour at 38½ weeks gestation. During the second stage of labour, she expelled a polypoid mass per anus with a Valsalva manoeuvre. The anal mass was 6 cm long, connected by a stalk. After vaginal delivery of a normal female infant weighing 2910 g (Apgars 8/9), the mass was ligated at the anus with 2-0 chromic suture and excised. The stalk extended into the anus another 1-2 cm. The patient was discharged on her 3rd post-partum day after an unremarkable recovery. Routine laboratory work including platelet count were all within normal limits. The mass was identified as an anal angiofibroma.

The patient had a 1-2 year history of feeling a mass partially protruding per anus when straining with a bowel movement. This became more noticeable during this pregnancy. She would always replace it back into the rectum. She had no history of bowel disease or rectal bleeding.

Four weeks post-partum a proctosigmoidoscopy revealed the healed stump of the angiofibroma, without other lesions up to 20 cm. A scheduled barium enema was not performed because the patient was lost to follow-up.

Microscopically the surface was covered with stratified squamous epithelium without dysplasia. The interior of the mass consisted of loose fibrous connective tissue with symplastic giant cells scattered throughout (Figure 1). The general cellular element was spindle-shaped without mitotic activity. Atypical of most fibromas, there was a uniform distribution of vascular channels. The tumour's fibrous component however was too excessive to allow classification as a haemangioma. The appearance of this tumour was intermediate between that of a fibroma and haemangioma, hence the descriptive classification as an angiofibroma.

The stalk showed areas of infarction, probably due to torsion. Areas of haemorrhage, necrosis, and heavy infiltration with acute and chronic inflammatory cells were seen.

Discussion

Haemangiomas are common neoplasms most often occurring on the skin and mucous membranes. Rarely are they found in the colon and rectum.^{1,2} Still less commonly found in the rectum are fibromas.¹ Angiofibromas are very rare neoplasms which usually occur in the nasopharynx of post-pubertal males.³ This tumour has been shown to be androgen sensitive by Lee *et al.*,⁴ and has no oestrogen or progesterone receptors. The hormonal dependence of angiofibromas of other sites is unknown. By contrast, haemangiomas of any site have a greater tendency to occur in females (female/male ratio=2/1), and appear to be hormonally responsive, increasing in size during pregnancy.⁵

In our patient, it is suggestive that her rectal tumour grew in size during this pregnancy. She had, however, no evidence of androgen excess. Therefore, although the tumour was histologically an angiofibroma, it appeared to act more like a

Correspondence: Richard B. Kurzel Ph.D., M.D.
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Figure 1 Anal angiofibroma. Stratified squamous epithelial surface. Density of vascular channels, uniform in distribution, is shown. (Haematoxylin & eosin $\times 40$)

pure haemangioma. Unfortunately no oestrogen, progesterone, or androgen receptor analyses were performed. Since there are no other reports of the behaviour of this type of tumour during pregnancy, conclusions can only be made pending other reports.

References

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In the clinical management of such lesions, similar to haemangiomas in general, total excision of the mass must be performed rather than biopsy, because of the danger of severe bleeding.