BLUEDER CAVERNOUS HEMANGIOMA. CASE REPORT

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Summary.- OBJECTIVE: To report a case of a bladder cavernous hemangioma, as well as the main features of its diagnosis and treatment.

METHODS: A 74 year old patient, regular smoker, presented with total macroscopic hematuria of moderate intensity with large rounded clots. On physical examination the patient’s mucous membranes color was normal, and digital rectal examination showed a normal size prostate with fibroelastic consistency.

RESULTS: An abdominal ultrasound was performed showing a slight bladder bottom thickening in addition to free clots and a homogeneous and normal prostate. Cystoscopy confirmed the presence of a sessile violet-colored rounded retrotrigonal tumor, 2 cm in diameter and 0.5 in height, it was immediately resected. The pathological study reported cavernous hemangioma. Patient’s evolution has been satisfactory.

CONCLUSIONS: Bladder cavernous hemangioma is a rare cause of hematuria, and transurethral resection of the small size lesions constitutes an effective option as a definitive surgical treatment.

Key words: Hematuria. Benign bladder tumour. Bladder cavernous hemangioma. Transurethral endoscopic resection.

Resumen.- OBJETIVO: Presentar un caso de hemangioma cavernoso vesical y aspectos de su diagnóstico y tratamiento.

MÉTODO: Paciente masculino de 74 años de edad y fumador inveterado, que asiste por hematuria total acompañada de coágulos grandes y redondos. Al examen físico las mucosas estaban normo coloreadas y, en el tacto rectal, la próstata era de tamaño normal y de consistencia fibroelástica.

RESULTADO: En el ultrasonido abdominal existía ligero engrosamiento del fondo vesical y coágulos sanguíneos libres; la próstata homogénea y de tamaño normal. En la cistoscopia se constató una tumoración retrotrigonal redondeada, de unos 2 cm de diámetro y 0,5 cm de altura, sésil y de color violáceo que se resecó en su totalidad. El informe anatómopatológico de la pieza quirúrgica fue hemangioma cavernoso. El paciente ha evolucionado satisfactoriamente.

CONCLUSIÓN: El hemangioma cavernoso vesical es una causa infrecuente de hematuria y la resección transuretral de las lesiones de pequeño tamaño, una opción efectiva para su tratamiento definitivo.


INTRODUCTION

The bladder cavernous hemangioma constitutes an infrequent nosological entity. Its biological behaviour is benign, and it is considered its origen dwell on the angio- blastic cells forming aberration blood vessels (1).
In general, they are less than three centimeters in diameter and prevailed at the cupule, trigone and back of the bladder. Most of them are isolated or associated with syndromes such as Kippel-Trenaunay, Rendu-Weber-Osler and Sturge-Weber (2).

Macroscopy hematuria is frequently the principal clinical manifestation. Several different imaging techniques have been used to make the diagnosis including the intravenous urography, the ultrasound, the computarized axial tomography and the nuclear magnetic resonance. Nevertheless, the definitive diagnosis is made by means of the lesion biopsy histological study during the cystoscopy (3).

There are many therapeutic options depending on the size of the tumour and on the patient's clinical condition. In sole and small lesions electro-fulguration, transurethral resection and Neodimio-Yag laser have been used successfully, while in extensive tumours or in the presence of malignity suspicion the partial cystectomy is the best choice (4).

In this paper a new case of a bladder cavernous hemangioma as well as aspects about its diagnosis and the treatment applied is presented.

**CASE REPORT**

A 74-year-old patient with antecedents of being a habitual smoker who came to the emergency ward presenting macroscopic hematuria with great and rounded clots since the day before, without any other associated symptom.

On the physical exam the mucosas were wet and normo-coloured, and the abdomen was neither painful nor presenting visceromegalies. The digital rectal examination showed the prostate had a normal size and a fibroelastc consistency. Blood analysis was within normal parameters.

In the applied ultrasound a light bladder bottom enlargement was described as well as the presence of free blood clots inside it; the prostatic gland was homogenous and with a normal volume (Figure 1).

A three-way Foley 20 Fr urethral probe was used to put the bladder at rest and, at the same time, do a cystoclysis with a physiological saline solution. In spite of these measures, a lesser intensity hematuria persisted without producing any hemodynamic un-balance in the patient.

In the cystoscopy performed a sessile violet-coloured tumour with a 2 cm diameter and 0,5 height in the retrotrigonal region was observed. It was immediately totally resected and its implantation base fulgurated. The patient had the urethral probe on until the next morning, when it was retired and he was discharged asymptomatic.

The anatomo-pathological report of the surgical piece was bladder cavernous hemangioma.

The patient’s evolution has been satisfactory. He has not had more hematuria, and in both the evolutive control ultrasound and the cystoscopy there were not signs of the illness local recidivity.

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**Figure 1.** Abdominal ultrasound. Free clots can be observed and a slight bladder bottom enlargement indicated by arrows.

**Figure 2.** View of the surgical piece histological study. Multiple dilated slender wall blood vessels surrounded by fibrotic interstice typical of the cavernous hemangioma can be appreciated (HE X 40).
DISCUSSION

Bladder hemangiomas are rare benign tumours. As regards to frequency, within the types of hemangiomas morphologically described the cavernous hemangioma prevails over the capilar and the arteriovenous hemangiomas (5).

The bladder cavernous hemangioma is classified as a tumour of mesenchimatous origen. They are very infrequent and, within the 5% of the bladder non-transitional neoplasms as a whole they occupy about a 0.6% of the total. They constitute incidental findings in patients being searched for hematuria as it happened in the case of this report where, due to the patient’s very ancient tobaccoism antecedents, a malign bladder tumour was expected to be found.

They are more frequent in males at a rate of 3.7: 1, coinciding with the patient in this paper. As regards to the apparition age some articles considered that they are commonest in adults (4,5), an opinion shared by the authors. However, others such as García Rodríguez and col (3) affirmed that it constitutes a more frequent finding in pediatric ages, with up to a 65% of cases in youngsters than 15 years old.

Macroscopy hematuria as it happened to the patient in this investigation is the main symptom from the clinical point of view and in accordance with the literature consulted. Other less common symptoms reported as the form of presentation of the bladder cavernous hemangioma are: suprapubic pain, irritating symptoms, and urinary retention by clots (1,3).

In the imaging study of these patients several kinds of images could be used. The ultrasound is the most rapid and harmless, and it is used in the first instance as in this case report where it is posed that solid and heterogenous lesions or with anecicos multiple spaces can be described (3,4). In the patient of this investigation only a bladder bottom enlargement and free clots could be observed; that is why the ultrasound did not give diagnostic definitive elements.

The intravenous urography that objetives repletion defects in up to a 50% of cases, the computarized axial tomography that is able of showing a mass with multiple calcifications, and the nuclear magnetic resonance which shows a hiper-intense image in T 2, being useful in the differential diagnosis with other tumours such as rabdomiosarcomas, are also used in the imaging screening (4).

In order to establish the definitive diagnosis it is essential to perform a cystoscopy with the taken a biopsy of the lesion; the endoscopy checking is also used in the periodic control of them (1,3,5,6). The typical image consists on a bluish-violet colored sessile neo-formation almost never larger than 3 cm (1-3), coinciding with this paper patient’s tumour characteristics.

It is characteristic in the anatomo-pathological study that the tumour mass is constituted by a collection of endothelial vascular spaces surrounded by a fibrotic interstice (3); the case in this paper presented similar histological findings. In the macroscopic study of these lesions the differentiation with other similar macroscopic aspect bladder tumours is basic such as: endometriosis, melanoma and sarcoma (1,4,5).

The size of the tumour as well as the intensity of the hematuria and its repercussion on the patient’s hemodynamic condition is taken into account in the management of the bladder cavernous hemangioma. Transurethral resection and electrofulguration (1-3,4,6) are applicable alternatives in small tumours with very low recurrence indexes; such procedure were applied on the patient in this investigation, presenting a favourable evolution. Laser with Neodimio-Yag has also been used successfully which, besides being used as a tumoral reducteur, is useful in the control of hemorrhage (2-4,6,7).

Partial cystectomy is indicated in greater size lesions or in lesions presenting profused bleeding (2-4). Nevertheless, in the bladder cavernomatosis cases this surgical treatment option is frequently seen limited due to the multiplicity of the cavernomatous lesions; that is why it is considered that observation must be an alternative to keep in mind, letting open surgery for those cases in which the patient’s life is at risk (8).

CONCLUSION

To finish this paper it is considered that the bladder cavernous hemangioma is an infrequent cause of hematuria, and that cystoscopy with small size transurethral resection constitutes an effective option for its definitive surgical treatment.

REFERENCES AND RECOMMENDED READINGS

(*of special interest, **of outstanding interest)

URETHRAL BLEEDING AFTER OPEN RADICAL PROSTATECTOMY TREATED WITH SELECTIVE ARTERIAL EMBOLIZATION. A RARE COMPLICATION


Summary.- OBJECTIVE: Gross hematuria in the immediate postoperative radical prostatectomy is a rare complication. According to different series reviewed, significant bleeding after this surgery appears between 0.5-1.5% of the cases. METHODS: 58 year old male with localized prostate cancer who underwent open radical prostatectomy with preservation of the neurovascular bundles and a left accessory pudendal branch. In the 4th postoperative day patient presented severe hematuria and urethral bleeding.

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