Case Reports

BLADDER HEMANGIOMA: CASE REPORT

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Summary.- OBJECTIVE: Bladder hemangioma is a benign rare lesion. There are no pathognomonic clinical signs and management is controversial due to the bleeding risk. We report a bladder cavernous hemangioma resolved using bipolar transurethral resection.

METHODS: We review the case of a female patient who presented with asymptomatic hematuria. On cystoscopy we discovered a reddish sessile lesion compatible with bladder hemangioma. We describe the diagnostic work up, surgical management and review other therapeutic alternatives for these lesions.

RESULTS: Fifty five year old healthy female patient consulting for total painless hematuria. Cystoscopic evaluation revealed a 1 cm diameter sessile reddish elevated lesion near the bladder neck. We performed a transurethral endoscopic resection using the Gyrus Bipolar resectoscope®. Pathologic report concluded cavernous angioma.

CONCLUSION: Bladder hemangiomas are benign and rare lesions. Clinical presentation has no pathognomonic signs although gross painless hematuria is the most frequent complain. Management is controversial due to the bleeding risk of this highly vascularized lesion. However, it appears that small lesions could be treated using transurethral resection. Although they have a benign course, follow up is mandatory to detect recurrence or residual disease.

Keywords: Endoscopic treatment. Bladder hemangioma.

Resumen.- OBJETIVO: El hemangioma vesical es una patología benigna de baja incidencia y difícil diagnóstico. Su manejo es controversial principalmente debido al riesgo de sangrado que este presenta. Reportamos el caso de un hemangioma vesical cavernoso manejado mediante una resección transuretral.

MÉTODO: Revisamos el caso de una paciente de sexo femenino que consulto por hematuria asintomática asociada a lesión sesil vesical, compatible con un hemangioma vesical. Describimos el estudio y manejo quirúrgico, discutiendo además las alternativas terapéuticas para este tipo de lesiones.

RESULTADOS: Paciente de sexo femenino de 55 años de edad, sana, consulta por cuadro de hematuria macroscópica asintomática. La cistoscopia revela la presencia de una lesión sesil rojiza de 1 cm de diámetro próxima al cuello vesical. Realizamos una resección transuretral utilizando un resectoscopio bipolar Gyrus®. El estudio anatomopatológico reveló un hemangioma cavernoso.

CONCLUSIÓN: Los hemangiomas vesicales son lesiones benignas de baja incidencia. Si bien no existen características clínicas específicas para esta patología, la hematuria suele ser el signo clínico más frecuente. El manejo es controversial principalmente debido a su gran vascularización y el consecuente riesgo de sangrado intraoperatorio. Para lesiones de pequeño tamaño la resección transuretral representa una buena alternativa.

Keywords: Hemangioma vesical. Tratamiento endoscópico.

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INTRODUCTION

Hemangioma is a benign tumor which accounts for 0.6% of bladder lesion (1, 2). It has no clear gender or age predilection and it often presents with gross painless hematuria. Management is controversial due the bleeding risk, and numerous therapeutic options are described in the literature. We present a case of a bladder hemangioma resolved using bipolar transurethral resection.

CASE REPORT

Previously healthy 55 year old female patient consults for total painless hematuria. Cistoscopic evaluation reveals a 1 cm diameter sessile reddish raised lesion near the bladder neck. We performed a transurethral endoscopic resection using Gymruss Bipolar resectoscope® and a urethral catheter was left. Postoperative period was uneventful, and patient was discharged at the next day from the surgery without urethral catheter. Pathologic report concluded mature urothelium with reparative hyperplasia with a lamina propria presenting marked edema, hyperemia and vascular proliferation, partly of venous type of wall, partly arterial muscular wall, located mainly in the lamina propria of the mucosa, compatible with a cavernous angioma.

DISCUSSION

Hemangiomas are very rare primary bladder lesions, accounting for 0.6% of its tumors.

This benign congenital lesion has no predilection for gender or age, but is most common in white men and 65% of the patients are younger than 15 years old (1, 2, 3). Hemangiomas are classified into cavernous, capillary and arteriovenous, being cavernous the most common (2). Patients present with intermittent gross painless hematuria, irritative voiding symptoms, obstructive symptoms, abdominal pain and painful ejaculation (1, 2). Usually bladder hemangiomas presents as isolated small lesions, although up to 30% of cases presents in association with cutaneous or visceral vascular malformations, being the most common localizations anus, vulva, buttocks, vagina, labia, scrotum, penis, lower abdomen and thigh. Hemangiomas could present in the context of Klippel-Trenaunay or Sturge Webber syndrome (2), with cutaneous hemangiomas, varicose veins, and hypertrophy of the involved extremity (3). Up to 3 to 6% of patients with Klippel-Trenaunay syndrome have bladder hemangiomas. Therefore, complete urologic evaluation is recommended in this syndrome (1, 3).

This lesion has a benign course and usually presents as an incidental finding during work up for hematuria or voiding symptoms. Endoscopic findings are non specific although the presence of a sessile, blue, raised mass in a young patient who presents with hematuria is highly suggestive of a bladder hemangioma (2). Endoscopic differential diagnosis for raised pigmented lesions includes endometriosis, melanoma and sarcoma and therefore accurate diagnosis requires confirmation by biopsy, although it carries a high possibility of uncontrollable bleeding (2). Intravenous pyelography, ultrasonography and computed tomography could be helpful in defining the extent and localization of the tumor (1, 2). Cystoscopy, as we mentioned earlier, could show a sessile, broad based lobulated mass with bluish red color, usually pedunculated (1). Sixty-six percent of the lesions are solitary and located on the...
dome or trigone and 34% are multicentric. Lesions are rarely located at the bladder neck or ureteral orifices (1, 2). Occasionally the tumors extend outside the bladder and may invade other pelvic organs, condition known as pelvic angiomatosis (1). Its association with transitional cell carcinoma is rare.

Treatment is indicated because of the recurrent hematuria but, due to the bleeding risk, management is controversial and numerous therapeutic approaches are described in the literature (2, 4).

Biopsy and fulguration, transurethral resection (TUR), partial or complete cistectomy, sclerosing agent injections, irradiation, systemic steroids, interferon alpha therapy and Nd: Yag laser are therapeutic options (2). Partial cistectomy is the recommended treatment for surgically accessible lesions (3). On the other hand, TUR has the risk of uncontrollable bleeding (3, 5), however in a report of the Mayo Clinic (2), with 19 patients, biopsy and fulguration of small lesions (<3 cm) does not create a significant bleeding and appears to treat this lesions adequately, as well as lesions located in the female bladder neck. Having this in mind is that we decided to treat our patient with TUR, achieving satisfactory results.

Radiotherapy is not felt to be acceptable in the setting of these benign bladder lesions (6). However, Liang reports successful results with 2,500 cGy to the bladder in two cases. Nd-Yag laser therapy has an effect in reduction of size and bleeding frequency and is a good alternative when partial cistectomy is precluded (1, 3). Although the benign nature of this lesion, appropriate follow up is mandatory to detect recurrent or persistent disease (1, 4).

CONCLUSION

Bladder hemangiomas are benign and rare lesions. Clinical presentation has no patognomonic signs although gross painless hematuria is the most frequent complain. Management is controversial due to the bleeding risk of this high vascularized lesion. However, it appears that small lesion could be treated using transurethral resection. Although it has a benign course, follow up is mandatory to detect recurrence or residual disease.

REFERENCES AND RECOMMENDED READINGS

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


