CONCLUSIONS

Subcutaneous and cutaneous metastases are rare in prostate cancer, although they may be more common than believed because PSA level may not rise and the clinical course can be practically asymptomatic. In any case, metastasis development in the skin and subcutaneous tissue indicates a somber disease prognosis with a survival of less than 6 months [9].

REFERENCES AND RECOMMENDED READINGS (*of special interest, **of outstanding interest)


Case Reports
Arch. Esp. Urol. 2009; 62 [7]: 585-589

MEDIAN RAPHE CYST. REPORT OF TWO CASES AND LITERATURE REVIEW

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Summary.- OBJECTIVES: To report 2 cases of median raphe cysts, 1 in the penis and the other in the perineum

METHOD: Two cases of median raphe cyst are described; the first was treated by surgery and the second required no treatment.

RESULTS: The surgical patient experienced no complications and was asymptomatic with no recurrence at 2 years.

CONCLUSIONS: Median raphe cysts are a rare, benign condition of uncertain etiology. Treatment consists on simple excision.

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Accepted for publication: September 10th, 2008.
**Keywords:** Median raphe cyst. Embryonic rest.

**Resumen.-** OBJETIVOS: Presentar dos casos de quistes de rafe medio, uno de localización peneana y otro perineal.

MÉTODO: Se diagnostican y describen dos casos de quistes de rafe medio, a uno se aplicó tratamiento quirúrgico y el segundo no precisó de tratamiento alguno.

RESULTADOS: La intervención quirúrgica del paciente operado no tuvo complicaciones y a los dos años de la misma estaba asintomática y sin recidiva.

CONCLUSIÓN: Los quistes de rafe medio son poco frecuentes; es una patología benigna y su etiología no está completamente aclarada. Su tratamiento consiste en la exéresis simple.

**Palabras clave:** Quistes de rafe medio. Restos embrionarios.

**INTRODUCTION**

Median raphe cyst was first described in detail by Mermet in 1895 (1,2). Such lesions are uncommon and can occur in the midline, following the raphe, from the distal tip of the penis to the margins of the anus, although the region usually affected is the distal area near the glans (3).

**Case 1**

A 32-year-old patient reported perineal bultoma that had been present from childhood as long as he could remember (Figure 1). The examination revealed a mass at the midline of the perineum; the mass was soft, elastic, and nonpainful, and did not appear to be adhered to deep surfaces. The voiding and retrograde cystourethrography was normal. The magnetic resonance imaging study of the pelvis and perineum showed the morphology, fluid content, and absence of any communication between the mass and other structures or organs (Figure 2a, 2b, 2c); the size was 5x2x1.5 cm. The cyst was excised under spinal block; perioperative examination of the surgical specimen revealed that the cyst was multilocular (Figures 3 and 4). The histologic study showed a multilocular cystic cavity, with pale brown mucus-fluid content, partially lined by pseudosтратified respiratory epithelium with mucosecretory cells positive for periodic acid-Schiff staining and ciliated cells, as well as nonkeratinizing squamous epithelium. Cytokeratin (CK) immunohistochemistry revealed columnar cells and apical cells of squamous epithelium with immunophenotype positive for CK 7, epithelial membrane antigen, and carcinoembryonic antigen, and negative for CK 20.

At the time of writing, 2 years after surgery, the patient is asymptomatic with no recurrences.

**DISCUSSION**

The lesions are congenital and readily diagnosed clinically, but usually diagnosed in adulthood rather than childhood because they are often not evident for years and typically silent, particularly when small, and only grow and cause symptoms in the case of traumatic injury or infection (3,4). Other terms apart from median raphe cyst have been used: mucus cyst of the penis, genitoperineal cyst of the medium raphe, parameatal cyst, hydrocystadenoma, apocrine cystadenoma, and urethroid cyst (1,2,5,6), although these cysts are now

**FIGURE 1.** Perineal median raphe cyst.
known referred to as median raphe cysts because they have similar clinical and histologic characteristics.

Only a few cases have been published, mostly in dermatology journals rather than urology publications. The cysts are usually asymptomatic; hence, many cases are probably not reported.

Cyst formation is explained by embryologic anomalies or closure defects of the raphe, sometime due to the persistence of embryonic rests during invagination and fusion of the urogenital folds, the presence of embryologic epithelium protruberances trapped before fusion of the folds, or abnormal development of the Littre’s (ectopic periurethral) glands, with intraepithelial mucous glands observed in the latter cases (5,7,8,9).

Clinical symptoms are usually rare, although cystic infection or ulceration sometimes occurs (9). Discomfort (e.g., during sexual relations) may occur if the cyst is large and urinary symptoms may be present if the cyst is near the urethral meatus (9). In some cases, the patient consults for cosmetic reasons or to obtain a diagnosis or recommendation, even though no symptoms are present.

The differential diagnosis should be performed with epidermal cysts, steatocystoma, glomus tumors, dermoid cyst, urethral diverticulum, and pilonidal cyst (3,6,7,9). A histologic study will also clarify the diagnosis if the lesions are small and resemble molluscum contagiosum or condylom (8).

The lesion may produce a wide spectrum of results in the histopathology study, including stratified, pseudostratified, and squamous columnar epithelium, resembling the epithelium of the male urethra (8,10). Three histologic patterns have been described: 1) urethral type, present in 70% of cases with epithelium similar to the urethra; 2) epidermoid type, composed of squamous epithelium (which accounts for 10% of cases); and 3) mixed type formed by a combination of the above (5).
The histologic study usually reveals the presence of an irregular cystic cavity, covered with an epithelium that corresponds to that of the urethra portion from which it originates, i.e., nonkeratinizing squamous stratified epithelium in the distal portion (ectodermic origin) and columnar pseudostratified epithelium when it originates from the rest of the urethra (endodermic origin) (3,6).

Median raphe cysts are positive for periodic acid-Schiff stain, colloidal iron, and Alcian blue (4,7). Immunohistochemical studies based on immunostaining with cytokeratins, particularly CK 7, will confirm the urothelial origin of these cysts. The carcinoembryonic antigen immunostaining observed particularly in columnar cells probably indicates the dysembryogenic cloacal nature in cyst genesis (2,10). The lack of immunoreactivity for CK 20 indicates the benign, nondysplastic nature of these lesions (2,6).

**FIGURE 5.** Positive immunohistochemistry reactions of apical cells for cytokeratin 7 and carcinoembryonic antigen.

**FIGURE 6.** Cyst partially lined by respiratory-like pseudostratified epithelium with mucus secretory cells (positive periodic acid-Schiff staining) and nonkeratinizing squamous epithelium.

**FIGURE 7.** Median raphe cyst of the penis.
Treatment consists of surgical excision in the case of symptoms or for cosmetic reasons. If the lesions are small and asymptomatic, the best option is to take a wait-and-see approach.

REFERENCES AND RECOMMENDED READINGS
(*of special interest, **of outstanding interest)


Summary.- OBJECTIVES: We report a case of urachal remnant disease and review the literature.

METHODS/RESULTS: We present the case of an urachal cyst in a 13-year-old patient who was admitted to the emergency department with acute abdominal pain. Differential diagnosis of his symptoms was made with other diseases such as appendicitis and inflammatory bowel disease.

CONCLUSIONS: Urachal remnant diseases are rare and they usually present during the neonatal period with fever and wet navel, lower abdominal pain around the middle line, palpable mass and urination symptoms with or without urinary infections. The presentation as acute abdominal pain in an older child is less common, and its differential diagnosis must be performed with other abdominal or pelvic acute diseases. The most appropriate imaging technique is an ultrasound exam.