Malakoplakia of the urinary bladder

Z.B.M. Niazi, and B. Mooney
Department of Urology, Regional Hospital, Dooradoyle, Limerick, Eire.

Malakoplakia literally means soft plaque and this chronic granulomatous condition is being diagnosed more often and recent literature reveals that an effective cure is now available.

Case Report

A 64 year old lady presented with a two day history of frequency, dysuria and haematuria. In the past she had recurrent urinary tract infections, passed a ureteric stone in 1946 and had repair of cystocele in 1970. Then in 1972 she had a transabdominal hysterectomy and subsequently developed a ureterovaginal fistula. The right ureteric stricture persisted and the resultant chronic nephritic kidney was excised in 1974. She continued to complain of urinary symptoms on and off till her latest admission. Her urine culture grew E. Coli and cystoscopy revealed yellow plaque-like excrescences lining the bladder and the histology report confirmed the presence of Michaelis Gutmann bodies which are pathognomonic of Malakoplakia.

She was initially treated with Cephradine but showed no improvement and was then commenced on Trimethoprim and Vitamin C. On follow up her symptoms gradually regressed and urine became clear.

Discussion

In 1902 Michaelis and Gutmann described a chronic granulomatous inflammatory disease which was very aptly named Malakoplakia by Von Hansemann the following year.1 The underlying abnormality in Malakoplakia is a low cGMP/cAMP ratio resulting in poor functioning of intracellular microtubules and thus defective phagocytosis. The improperly digested bacteria then become mineralized, leading to the formation of the diagnostic Michaelis Gutmann bodies within the phagolysosomes.2

Malakoplakia of the bladder is the commonest variety of this rare disease occurring in 40% of all patients. Approximately 200 cases have been reported with a female to male ratio of 4:1 when considering the urinary tract. The peak age incidence is more than 50 years.3 Many patients with Malakoplakia have infected urine and a strong correlation with coliform infections has been noted. Besides coliforms, immunosuppression and hypersteroidism play an important role in the pathogenesis of Malakoplakia. The reports of successful treatment regimens of Bethanecol, Ascorbic acid and Trimethoprim sulphamethoxazole over the last few years are based on the fact that the cGMP levels are increased by cholinergic agents like Bethanecol while cAMP levels are reduced by Ascorbic acid whereas the antibiotics should be active intracellularly.2 The successful treatment
with the combination therapy prompted us to write about this rare condition.

REFERENCES

