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Introdução e Objetivo

Recurrent urinary tract infections (RUTI), defined as more than 3 episodes of urinary infection per year or more than 2 separated episodes per semester (1), negatively impacts on quality of life (2). The association of RUTI and chronic trigonitis, although still controversial, has been increasingly reported by some authors (2, 3). Histologically, there are different variants of chronic trigonitis such as erosive trigonitis and squamous metaplasia (SM). SM is a proliferative lesion in which the normal urothelium is replaced by a non-mature keratinized squamous epithelium (3), which may represent an adaptive replacement of cells caused by adverse environmental conditions. On the other hand, Human Papillomavirus (HPV) infection has been isolated in the urine of women with RUTI (3, 4, 5). Here, we investigate the associations of SM and HPV infection in women with RUTI.

Método

Between August 2006 and December 2017, 73 women with RUTI, who had failed multiple previous antibiotic courses due to progressive antibacterial resistance, were prospectively evaluated for chronic trigonitis. On cystoscopy (figure 1), all patients presented elevated scaly inflammatory lesions in the trigonal and/or bladder neck area. Biopsies were harvested from the most exuberant trigonal lesions for histological examination and *in situ* hybridization for HPV.

Figuras

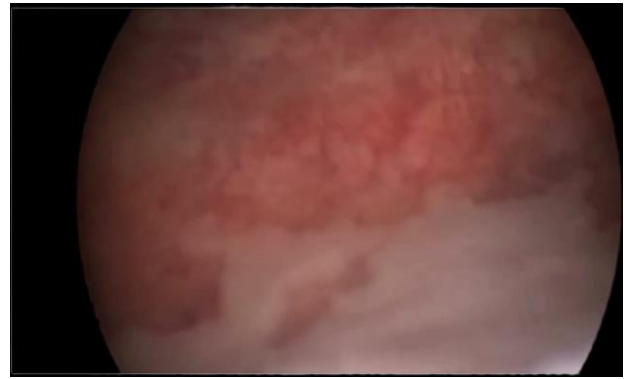


Figure 1: Cystoscopic view of squamous metaplasia lesions in a patient with trigonal HPV infection

	Squamous Metaplasia	Chronic Erosive Trigonitis
n	31	42
HPV	4	0

Table 1. Abbreviations: HPV, human papillomavirus.

Resultados

The median age of the patients was 64 (17–76) years. The histological analyses indicated the presence of squamous metaplasia (SM) in 31 patients (42%) and chronic erosive trigonitis in 42 patients (58%). *In situ* hybridization of the trigonal biopsies detected HPV only in squamous metaplasia group: 4 of 31 patients (13%). HPV was not detected in the chronic erosive trigonitis group. (Table 1)

Conclusão

In our series, HPV infection was only detected in trigonal squamous metaplasia lesions. On the other hand, none of the patients with chronic erosive trigonitis had HPV infection detected by *in situ* hybridization. To our knowledge, this is the first report that links HPV infection and squamous metaplasia in women with RUTI. Prospective controlled studies are needed to determine the role of HPV infection in this specific population.

Referências

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