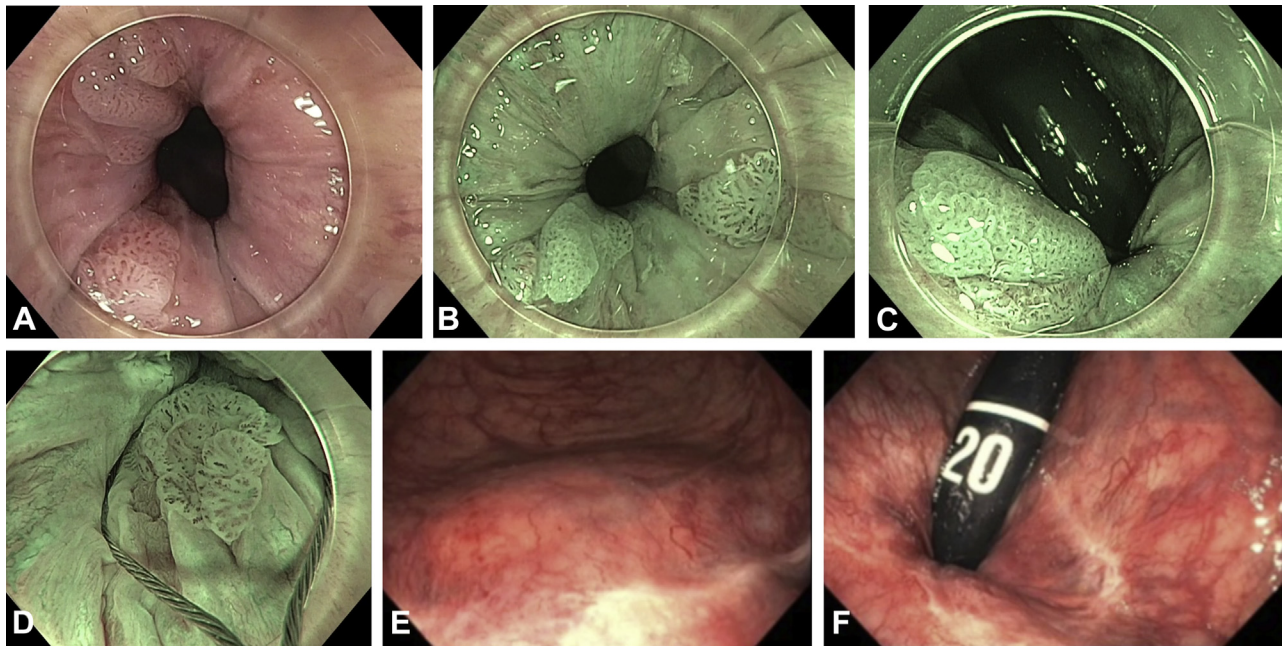# Underwater endoscopic mucosal resection of anal condyloma

Figure 1. A, Two anal condyloma lesions, seen extending beyond the dentate line on high-definition white-light imaging in forward view. **B,** The same 2 anal condyloma lesions, seen on narrow-band imaging in forward view. **C,** Anal condyloma lesion seen on retroflexion, to accurately define its margins. **D,** Underwater EMR of anal condyloma with use of a 10-mm stiff snare. **E,** Postresection scar at 2.5-year follow-up visit, seen on forward view. **F,** Postresection scar at 2.5-year follow-up visit, seen on retroflexed view.

Condyloma acuminatum (CA) is a sexually transmitted disease caused by human papillomavirus (HPV) infection. It requires resection or careful follow-up, especially in patients with moderate to severe dysplasia, to prevent progression to malignancy. Treatment is also important to prevent the spread of infection to uninfected sexual partners, which is not possible with a surveillance-only strategy. Surgical management is commonly relied upon. Endoscopic submucosal dissection (ESD) has been described in a few case reports as a safe and effective technique, with low recurrence rates, in trained and expert hands. However, there is a dearth of literature on other endoscopic techniques in the management of CA.

We describe here our experience with endoscopic management of CA, wherein underwater EMR is used to successfully resect anal condyloma, with varying degrees of dysplasia (Video 1, available online at www.VideoGIE.org).

The technique uses careful examination of the distal rectum and anal canal, under both forward view and retroflexed views, with white light and also narrow-band imaging (NBI) (Fig. 1). Topical lidocaine gel is applied to the anal region to reduce discomfort and facilitate a thorough examination. A transparent cap is placed on the tip of the endoscope to improve visualization. A high-definition, magnified view with NBI helps determine the precise number of lesions and their margins, and may reduce postresection recurrence rates. The underwater EMR technique uses water immersion of the lesion, which makes the projections more prominent and achieves high-resolution images, thus enabling precise determination of lesion margins. Moreover, water immersion eliminates the need for submucosal injection and facilitates snare capture of lesions.

In our experience, underwater EMR is a safe and effective endoscopic technique, with low rates of condyloma recurrence. It is difficult to differentiate neoplasms from nonneoplasms with a small biopsy specimen alone, and this technique provides adequate tissue for precise histopathologic diagnosis for staging of anal intraepithelial neoplasia. It also scores over a surveillance-only strategy because it is therapeutic for moderate to severe dysplasia to prevent progression to malignancy, as well

Written transcript of the video audio is available online at www.VideoGIE.org.

as preventive in the spread of infection to uninfected sexual partners. After successful resection, we suggest continued close surveillance to detect any potential recurrence.

DISCLOSURE

Dr Friedland is a consultant for C2 Therapeutics and Boston Scientific. The other author disclosed no financial relationships relevant to this publication.

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