**Shoheli Alam[1], Abu Saleh Md. Waliullah[1] and A.K.M. Shamsuddin[2]**

[1]Department of Pediatric Surgery, Bangabandhu Sheikh Mujib Medical University, Shahbag, Dhaka; [2]Department of Surgery, Begum Khaleda Zia Medical College and Shaheed Suhrawardy Hospital, Dhaka, Bangladesh. e-mail: shohelims@ yahoo.co.in

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## Glyceryl trinitrate: The management of chronic anal fissure in patients who are unfit for surgery

We read with great interest the article by Siddique et al.[1] whose work shows that lateral internal sphincterotomy is the treatment of choice in chronic anal fissure when compared with 0.2 percent glyceryl trinitrate. We would like to further discuss this article by introducing a major route through which 0.2 percent glyceryl trinitrate could use in patients who are unfit for surgery.

Chronic anal fissure is most commonly seen in young adults who usually present with severe, sharp anal pain during, and persisting for as long as several hours after, defecation. Patients with chronic anal fissures generally have raised resting anal pressures and excessive resting pressures may reduce anodermal blood flow by compressing blood vessels as they pass through the hypertonic sphincter[2]. Until approximately 10 years ago the majority of the patients were treated by some form of surgical procedure aimed at reducing anal hypertonia. In the view of the complications associated with surgery, much work has gone into the development of new pharmacological agents that can relax smooth muscle, lower resting anal pressure and promote healing of chronic anal fissures[2,3]. Despite vast improvements in surgical techniques and pharmacological agents, management of chronic anal fissure continues to be a clinical problem in patients who are unfit for surgery such as in patients with severe neutropenia, hematological disorders, hepatitis, HIV, and some malignancies[4]. The present study performed by Siddique et al.[1] and nearly all of the studies in the literature designed for the management of chronic anal fissure exclude these patients. Additionally, to the best of our knowledge, there is no study about the safety and efficacy of 0.2 percent glyceryl trinitrate in this population. As a personal experience, we successfully treated three patients with severe neutropenia, one patient with leukemia, one patient with bleeding disorder and one patient with combined hepatitis B, C, and E by topical 0.2 percent glyceryl trinitrate. On the other hand, any treatment procedure has both limitations and potential complications, and topical 0.2 percent glyceryl trinitrate is no exception. Before prescription 0.2 percent glyceryl trinitrate in this population, the patients should be made fully aware of the potential side effects and under close follow up. This treatment option should be born in mind for above mentioned patients, as it may be of interest in examining the potential beneficial effects of this drug in patients who are unfit for surgery.

**Oktay Irkorucu, H. Bulent Ucan and Mustafa Comert**

Department of General Surgery, School of Medicine, Zonguldak Karaelmas University, Zonguldak, Turkey. e-mail:oktaytip@yahoo.com

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