Summary and Conclusion

A fistula-in-ano is a hollow tract lined with granulation tissue connecting a primary opening inside the anal canal to a secondary opening in the perianal skin. Secondary tracts may be multiple and from the same primary opening .This disease not only stresses the patient through soiling and foul smelling discharge but also causes panic. On the contrary, over enthusiastic operative treatment results in ever embarrassing faecal incontinence .The crypto glandular hypothesis is the most accepted theory in its pathogenesis

In the standard classification of anal fistula, the fistula is classified into two groups; low level fistula in which the internal opeing below the anorectal ring, and high level fistula in which the internal opening at or above the anorectal ring, but the most widely used classification is that of Park's in which the anal fistula are classified into; inter-sphincteric, trans-sphincteric, supra-sphincteric and extra-sphincteric.Successful surgical management of fistula-in-ano depends upon accurate assessment of the primary track, its internal opening and any secondary extension. Physical examination remains the initial preoperative diagnostic procedure. In our study, physical examination was unable to differentiate medium or high transsphincteric fistulas from intersphincteric tracks or detect high or pelvic (i.e. supralevator) secondary tracks and horseshoe fistulas. An accurate preoperative imaging technique may help to prevent recurrences and inadvertent sphincter injury. Currently, the main techniques used are fistulography and EUS is superior to both clinical examination and fistulography in classifying the complexity of anal fistulas.

Transtrectal US is a safe technique. The examination can be conducted in a brief period. Usually 10 minutes, without patient discomfort or patient preparation. In addition, the study is relatively

inexpensive as compared with CT and magnetic resonance imaging (MRI).

With three dimention endoanal ultrasound, fistula tract is visualized as tube-like hypoechoic lesion, when hydrogen peroxide 3% is introdcued into the fistula tract it generates small air bubbles, the ultrasonografic appearance is changed into bright hyperechoic. By comparing the two images, the fistula tract and its extentions could be identified and discriminated from previous scars.

This prospective study was carried out at Benha University Hospital

A total of 50 patients under went EUS (41 men, 9 women; mean age 37 years; range 14-60 years).

The study to compare between ultrasound and clinical examination plus fistulography in comparison with intra operative finding as the gold standerd for evaluation .

Sensitivity, specificity and accuracy of endoanal ultra-sonography and fistulography were calculated with reference to intraoperativefindings, considered the standard of reference. Accuracy of the ultrasound and radiographic assessmnets were compared.

All radiological studies were performed by the same radiologist and surgery was performed by the same team of surgeons.

Conclusions.

Anal endosonography and fistulography with radiopaque markers are important complements to surgical exploration for investigating anal sepsis and may be of value to the surgeon in planning a therapeutic strategy.

But anal endosonography is safer, less invasive, and accurate in identification of internal opening, secondary tracts, and abscesses