Solitary Rectal Ulcer Syndrome

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Abstract
A 19 year female came with the complaints of rectal bleeding, constipation, griping abdominal pain and mucous discharge per rectum. Abdomen was tender on examination. Digital rectal examination in the squatting position revealed anterior rectal wall prolapse to the anal verge. Sigmoidoscopy and biopsy confirmed the diagnosis of Solitary Rectal Ulcer (S.R.U.) Syndrome.

Case Report
A 19 year old pathan female was admitted in Surgical Unit I of Civil Hospital, Karachi with the complaints of rectal bleeding mixed with mucous, griping abdominal pain and constipation since 5 years.
Prior to admission in Surgical Unit I she had been treated for ulcerative colitis with Salazopyrine and oral and rectal steroids. She was also given anti-amoebic drugs to rule out amoebiasis. On another occasion she was kept in a plaster cast to rule out the possibility of self manipulation. In 1979, a temporary pelvic colostomy was done to determine the site of bleeding. Rectal bleeding had then ceased but recurred when the colostomy was closed. Her symptoms aggravated after the closure of colostomy.
On admission she was anaemic and tender in the lower abdomen. There was no visceromegaly. Digital rectal examination revealed an indurated, irregular area on the anterior wall. Examination in the squatting position disclosed an anterior rectal wall prolapse till the anal verge.
Sigmoidoscopy on one occasion revealed an indurated area at 8 ems with multiple small linear well-demarcated ulcers extending till 15 ems. Intervening mucosa was normal. In another sigmoidoscopic examination mucosa up to 20 cms was oedematous, thick and angry-looking with plaque-like pale areas in between. Of the 5 biopsies taken on different occasions only two showed fibrosis and ulceration.
A diagnosis of Solitary Rectal Ulcer (S.R.U.) Syndrome was made and she was put on haematinics, high residue diet and bulking agent (Tupaagol 4 Tsf t.i.d.). Her complaints had reduced since then and sigmoido copy also revealed healing of the ulcers. At discharge she was passing 5-10 ml of blood/stool instead of 30-40 ml/stool.

Discussion
Two terms namely “Occult Rectal Prolapse (O.R.P.) Syndrome” and “Solitary Rectal Ulcer (S.R.U.) Syndrome” are reported in the literature.
“O.R.P. Syndrome” is a recently introduced term in which rectal changes like ulcer, polyp or granulation occur in the rectal mucosa due to abnormal rectal descent. However, there is reluctance to adopt this term, because in most patients with occult rectal prolapse the rectal mucosa looks normal macroscopically.
The term “S.R.U. Syndrome” was first introduced by Madigan and Morson (1969) and described in detail by Rutter (1975) and Rutter and Ridder (1975). The syndrome was associated with occult rectal prolapse. Even this term lacks precision as only 35% of the cases (Martin et al., 1981) had a solitary ulcer of the rectum.
It has been proved by electromyography that patients with S.R.U. Syndrome have excessive activity of
the puborectalis during straining at defaecation (White et al., 1980; Rutter, 1974). The anorectal junction forms a right angle due to the pull of this muscle; the anterior wall of the rectum thus lies across the top of the anal canal and acts as a flap valve which maintains continence. Patients with prolapse try to defaecate through an unrelaxed puborectalis and the flap valve prolapses through an unrelaxed puhorectalis and the flap valve prolapses through the puborectalis sling. Prolapsed mucosa becomes strangulated resulting in congestion, oedema, necrosis or ulceration. A strong pelvic floor (of young persons) is necessary to produce this effect. Thus patients afflicted with S.R.U. Syndrome are usually young adults causing problems in diagnosis. Rectal prolapse often remains unrecognized, because demonstration of the prolapse is difficult and patients are embarrassed to complain of it. The natural history of the syndrome is benign.

Symptoms consist of tenesmus and passage of blood and mucous associated with constipation and straining at stool occasionally, nocturnal enuresis (White et al., 1980) and anal incontinence (Martin et al., 1981) have been observed but were not a feature in this patient. Depending upon the severity of symptoms prior to treatment Martin et al. (1981) has divided the patients into 3 groups. In ‘trivial’ (18%), symptoms cause minim ‘1 physical inconvenience. ‘Disabling’ (29%) produces major alteration in life-style or life-threatening haemorrhage. ‘Troublesome’ (53%) fits in between these extremes. Our patient belonged to this group.

Cases often have a palpable, tender colon, reduced anal tone or a patulous anus (Martin et al., 1981) but this case had none of these findings. However, digital rectal examination did reveal an indurated, irregular area anteriorly- where the pathology is more common. 25% cases disclose prolapse of the rectal wall to the anal verge in squatting position (Martin et al, 1981).

The sigmoidoscopic changes in the appearance and position of the abnormality in the same patient varies at different times (White et al., 1980). The typical ulcers and the white- topped polypoid lesions were not seen in our patient. The sigmoidoscopic findings seen in our patient are described in only 18% of the cases by Martin et al. (1981). Sigmoidoscopic findings of erythema and granularity usually lead to an incorrect diagnosis of non-specific proctitis (White et al., 1980) but in the latter the lesion is not localized to the anterior rectal wall like in S.R.U. Syndrome.

Regarding microscopy of the lesion fibromuscular obliteration of lamina propria is considered an essential feature of S.R.U. Syndrome (Martin et al., 1981), which was not seen in this case. However, this is expected in view of the late presentation, a problem also faced by White et al. (1980) in cases presenting late.

In 2/3rd of the cases studied by Martin et al. (1981), mild to complete symptomatic and sigmoidoscopic improvement occurred on conservative management consisting of high residue diet and bulking agents. The rationale of this approach is that treatment of the prolapse relieves the symptoms. These agents soften the stool thereby reducing the need to strain and consequently the symptoms. The mean response period is 11 months (Martin et al., 1981).

Surgical correction is indicated if the medical treatment fails, risk of permanent incontinence increase in advanced degrees of prolapse and ulceration. Procedures include Thiersh wiring (Martin et al., 1981), Ivalon sponge abdominal rectopexy (Martin et al., 1981; Naughton Morgan et al., 1972) and perianal insertion of a double loop of monofilament nylon (White et al., 1980).

It is important to keep a diagnosis of S.R.U. Syndrome in mind in young patients presenting with long-standing tenesmus and passage of blood and mucous per rectum. Digital rectal examination should be done in squatting position to elicit the occult prolapse. Sigmoidcopy and biopsy of lesion are essential to clinch the diagnosis. Conservative treatment with high residue diet and Isphagol may prove beneficial. It is imperative to ensure that bulk of stool has actually increased with treatment.

References