The Effect Of Oral Prednisolone Tablets On The Strangulated Haemorrhoids

Harith M. AL-Khateeb
Department of surgery. College of medicine. Tikrit university.

Abstract:

Strangulation is one of the complications of the haemorrhoids; it causes severe pain in the anal area with congestion, swelling, and even gangrene and sloughing of the haemorrhoids. From June 1st 1993 to June 1st 2000, I managed 34 patients with strangulated haemorrhoids. 22 patients, 65% (Group A) have been treated with the addition of prednisolone tablets 10mg tds for 3 days besides the traditional treatment (admission, prone position, antibiotics, analgesics, stool softeners and local soothing agents). 12 patients, 35% (Group B) have been treated by the traditional method only. From the 22 patients (Group A), 19 showed very good response by regression of the swelling and improvement of the pain within 24–72 hrs, while all the 12 patients (Group B) took 5-10 days to improve. So the Prednisolone orally is useful in the treatment of strangulated haemorrhoids provided that it is started within the first 48 hrs.

Keywords: Haemorrhoids, Strangulation, Prednisolone.

Introduction:

Improvements in our understanding of the anatomy of haemorrhoids have prompted the development of new and innovative methods of treatment. Unfortunately confusion still exists among lay people and doctors, who misuse the terms haemorrhoids and piles to cover a variety of complaints (2).

The main aim of the orally administered drugs for the treatment of the haemorrhoids is influence of the vessel-wall tone, decrease of the capillary permeability, circulation betterment, decrease of the oedema and blockage of the inflammatory mediators. (3)

Definition and management of strangulated haemorrhoids:

Strangulation means deprivation of blood flow to the piles due to severe spasm of the anal sphincter leads to congestion, swelling, thrombosis and may lead to gangrene, sloughing, infection and bleeding. (4,5)

The condition causes severe pain and discomfort.

Although some clinicians advocate emergency anal stretching and others haemorrhoidectomy, the majority of cases settle spontaneously. Previous symptoms improve, presumably due to fibrosis. Management therefore is simply bed rest as required, stool softeners, and analgesia. Local anaesthetic preparations have variable effects but may be helpful. (6,7)

However operation in so inflamed and congested area is difficult and has uncomfortable post operative period with a remote complications like delay in healing and even stricture of the anus (1,4,8).

The conservative treatment is composed of: complete bed rest, antibiotics, analgesics, local soothing and local anesthetic agents, laxative and nursing the patient in a prone or semi prone position. (10,11)

Usually it takes about 5–10 days for the problem to take over or resolve, and the patient is examined one month later to be evaluated for the need of surgery to the haemorrhoids as a cold case. (12)

Pathogenesis:

The anal canal has a triradiate lumen lined by three fibrovascular cushions of submucosal tissue. The cushions are suspended in the canal by a connective tissue framework derived from the internal anal
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The sphincter and longitudinal muscle. Within each cushion is a venous plexus that is fed by arteriovenous communications. These specialised vascular structures allow for enlargement of the cushion to maintain fine continence. In health as in disease the anal cushions appear in the right anterior, right posterior, and left lateral positions. Fragmentation of the connective tissue supporting the cushions leads to their descent. This occurs with age and the passage of hard stools, which produce a shear force on the framework. Straining produces an increase in venous pressure and engorgement. The prolapsed cushion has an impaired venous return, which results in dilation of the plexus and venous stasis. Inflammation occurs with erosion of the cushion's epithelium, resulting in bleeding. Haemorrhoids result from the pathological changes in prolapsed anal cushions. This mechanism was proposed as the theory of sliding anal lining and has superseded notions that piles were a form of varicose veins.

The causes of hemorrhoids are:
- Anal infections certain sports, such as horse riding and cycling professions remaining seated for long periods, such as lorry driving, and those that remain standing for long periods certain systemic disorders (cardiac insufficiency, portal hypertension) lesions of the pelvic region (including tumours, rectosigmoid disorders, and genital or prostate disorders) abuse of irritant laxatives certain endocrine alterations (eg pre-menstrual period) constipation, which may be caused by drugs, leading to excessive straining during defecation, leading in turn to excessive compression of the haemorrhoidal veins diarrhoea, surprisingly, may aggravate haemorrhoids, since it causes irritation of the anal canal genetic predisposition (weakness of the tissues surrounding the haemorrhoidal plexus, so that the veins adopt more tortuous courses, and dilate more readily than in normal subjects) homosexual practices increased intra-abdominal pressure, for reasons including obesity, pregnancy (last few weeks), coughing, sneezing, vomiting, or squatting position old age unsuitable diet, notably an excessive intake of cured red meats and similar products, spices, alcohol, coffee and chocolate inadequate fluid intake (less than one litre of water daily) insufficient fibre intake.

Classification: Haemorrhoids can be classified both by location and by severity. When classified by location, haemorrhoids can be internal, external or mixed. Internal haemorrhoids are mucosa-covered haemorrhoids in the upper part of the anal canal (ie the insensitive zone). They are dilated terminal ramifications of the superior and middle rectal veins, which drain tissues above the pectinate line. Haemorrhoids of this type are typically produced by intense contractions during the passage of hard faeces. External haemorrhoids are dilated terminal ramifications of the inferior rectal vein, which drains tissues below the pectinate line. Haemorrhoids of this type may extrude through the anal sphincter during defecation, but typically retract spontaneously or can be pushed back in manually. Alternatively, they may remain external. Mixed haemorrhoids are concurrent internal and external haemorrhoids. Haemorrhoids classified by severity can appear in any of the following grades:
- 1. inflammation of the plexus, with loss of fresh red blood following defecation
- 2. part of the plexus is externalised, but it may retract spontaneously due to its elastic nature
- 3. spontaneous retraction no longer occurs, but the haemorrhoid can be pushed in manually
- 4. The haemorrhoid cannot be pushed in manually, and may be very painful, even without defecation (because the blood contained within it has coagulated). After two or three days, the clot may be reabsorbed so that the pain is reduced, or it may ulcerate and worsen. Normally the outer part of the haemorrhoid does not exceed 1-2 cm in size.

Patients and methods: This descriptive study was conducted among 34 patients complaining of strangulated haemorrhoids, admitted to Samarra General Hospital along the period from June 1st 1993 to June 1st 2000.
The information was obtained by interviewing and clinical examination of the patients.

The sample was divided into two groups: Group A, was 22 patients (65%), 18 male (81.8%), 6 (33.3%) was at the age of 20 – 40 yr, 9 (50%) was at the age of 40 – 60 yr and 3 (16.6%) was at the age of 60 – 80 yr. Female patients were 4 (22.2%), 3 (75%) was at the age of 20 – 40 yr, One (25%) was at the age of 62 yr.

Group A patients were given a prednisolone 5 mg tablets 2 x 3 daily orally for 3 – 5 days in addition to the traditional treatment. (Fig.1,2,3),(Tables 1,2). Group B was 12 patients (35%), 9 male (75%), 3 (33.3%) was at the age of 20 – 40 yr, 5 (55.5%) was at the age of 40 – 60 yr, and One (11%) was at the age of 64 yr, 3 females (25%), was at the age of 20 – 40 yr. these patients were admitted to the hospital and treated by the traditional method only. (Fig.4),(Tables 3,4)

**Results:**

In Group A, From the 22 patients, 19 (86.36%) including all the 4 female and 15 male showed a very good response and rapid resolution of the problem within 24 – 72 hrs and the symptoms and signs started to fade up quickly like decrease or disappearance of the pain, decrease in the swelling and edema of the anal area, shrinkage and retraction of the haemorrhoids and most of the patients completed their treatment at their homes after a few days of hospitalization. 6 patients (31.5%) improved in the first 24 hrs, 10 (52.5%) improved after 48 hrs, 2 (10.5%) improved after 72 hrs and One (5%) improved after 4 days.

All these patients started the prednisolone intake within the first 24-48 hrs from the start of their problem.

There were 2 patients (10.5%) improved after 5 days and One patient (5%) improved after 7 days. The last 3 patients (13.6%) who showed delayed improvement, all began the intake of prednisolone late by more than 48 hrs from the beginning of the attack and showed no much difference in the treatment period of that with out prednisolon use. (Table 5)

In Group B (12 patients), 5 (41.6) felt comfortable after 5 days, 5 (41.6%) felt comfortable after 7 days and 2 (16.6%) improved after 10 days. (Table 6).

**Discussion:**

However the females are liable to suffer from their piles as frequent as males and even more especially during pregnancy and labor but in our culture in Iraq the females feel shy to present their piles problems to the doctors and if they do they consult a female doctor and that is why the female patient number is low in our study.

I could not find a research or literature relevant to the use of the oral prednisolone in the treatment of the strangulated haemorrhoids, and I will mention some studies used other oral drugs for the treatment of the haemorrhoids.

A combination of troxerutin 150 mg and carbazochrome 1.5 mg in patients with acute uncomplicated haemorrhoids. Using intramuscular injection one ampoule twice daily for one week, significantly improved the haemorrhoids. (16)

Daflon 500 mg tablet is a new flavonoid vasoprotector venotonic agent whose active principle is micronized and contain 90 % diosmin and 10 % flavonoids expressed as hesperidin, used at the dosage of two tablets per day for six weeks to one year. However the drug is safe but its benefit is limited. (17)

**Conclusions:**

1. The addition of prednisolone tablets orally in the dose of 10 mg tds for 3 – 5 days to the traditional treatment of the strangulated haemorrhoids has a beneficial effect to the improvement of the pain, congestion and swelling of the haemorrhoids and significantly shortens the period of the disease.

2. This beneficial effect of the prednisolone occurs provided that it is started early within the first 24 – 48 hrs of the beginning of the problem.

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3- Prednisolone tablets are cheap, available, easy to use and decrease the hospital staying and the period of the suffering of the patients.

References:

Table No. (1). Group (A) Male patients.

<table>
<thead>
<tr>
<th>Number Of Patients</th>
<th>Age Group</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>20 – 40 yr</td>
<td>33.3 %</td>
</tr>
<tr>
<td>9</td>
<td>40 – 60 yr</td>
<td>50 %</td>
</tr>
<tr>
<td>3</td>
<td>60 – 80 yr</td>
<td>16.6 %</td>
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Table No. (2). Group (A) Female Patients.

<table>
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<tr>
<th>Number of Patients</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>20 – 40 yr</td>
<td>75 %</td>
</tr>
<tr>
<td>1</td>
<td>60 – 80 yr</td>
<td>25 %</td>
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**Table No. (3).** Group (B) Male patients.

<table>
<thead>
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<th>Number Of Patients</th>
<th>Age Groups</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>20 – 40 yr</td>
<td>33.3 %</td>
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<tr>
<td>5</td>
<td>40 – 60 yr</td>
<td>55.8 %</td>
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<td>1</td>
<td>60 – 80 yr</td>
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**Table No. (4).** Group (B) Female patients.

<table>
<thead>
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<th>Number of Patients</th>
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<th>Percentage</th>
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<tbody>
<tr>
<td>3</td>
<td>20 – 40 yr</td>
<td>100 %</td>
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**Table No. (5).** Group (A) Patients With Period Of Response To Prednisolone.

<table>
<thead>
<tr>
<th>Number Of Patients</th>
<th>Period of Response</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>6</td>
<td>24 hrs</td>
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<tr>
<td>10</td>
<td>24 – 48 hrs</td>
<td>45.4 %</td>
</tr>
<tr>
<td>2</td>
<td>48 – 72 hrs</td>
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<tr>
<td>1</td>
<td>72 – 96 hrs</td>
<td>4.5 %</td>
</tr>
<tr>
<td>2</td>
<td>4 – 5 days</td>
<td>9 %</td>
</tr>
<tr>
<td>1</td>
<td>5 – 7 days</td>
<td>4.5 %</td>
</tr>
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</table>

**Table No. (6).** Group (B) Patients With Period Of Response Without prednisolone.

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<th>Number of Patients</th>
<th>Period of Response</th>
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</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5 days</td>
<td>41.6 %</td>
</tr>
<tr>
<td>5</td>
<td>5 – 7 days</td>
<td>41.6 %</td>
</tr>
<tr>
<td>2</td>
<td>7 – 10 days</td>
<td>16.6 %</td>
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