

Strengths and Limitations of Close Vs Open Haemorrhoidectomy in Patients of 2nd and 3rd Degree Haemorrhoids

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Fifty patients were randomly selected who presented with symptoms of hemorrhoids at out patient of surgical-I Jinnah Hospital, Lahore between Jan 01-June 02. Eligibility criteria were laid down and half of our study population was subjected to open haemorrhoidectomy and half to close. Post operatively all the study participants were evaluated for the healing time and stenosis. The results showed that hemorrhage less, healing time rapid with rare incidence of anal stenosis in closed as compared to open haemorrhoidectomy. The results were statistically significant when Fisher's exact probability was applied. Based on results it was concluded that closed haemorrhoidectomy is a far superior procedure than open.

Key words: Open and closed haemorrhoidectomy, post-operative complications, healing time.

Hemorrhoids (Greek-haema-blood, rhoos = flowing) syn piles (Latin; a ball) are veins occurring in relation to anus. The incidence of piles increases with age and it seems likely that at least 50% of people over the age of 50 have some degree of hemorrhoid formation. Men seem to be affected roughly twice as frequently as women. Hemorrhoids may be external or internal to the anal orifice and hence called as. Combined together they are called intero-external. The main symptoms associated with them are bleeding per rectum, pruritis, superficial anal wounds and prolapse².

Several forms of treatment are available, expectant or medical treatment, injection treatment, rubber band ligation, manual dilatation, Uro surgery, infra-red treatment. When indicated surgery still has the edge on others such as anal dilatation^{3,4}. Main surgical procedures include ligation with excision, sub-mucosal haemorrhoidectomy, excision of entire pile bearing area with suture, excision with clamp and cautery, closed haemorrhoidectomy.

Materials and methods

An analytical interventional study was conducted on 50 patients suffering from 2nd and 3rd degree hemorrhoids admitted through surgical outpatient of Jinnah Hospital, Lahore.

Twenty five patients were subjected to close and the same number to open haemorrhoidectomy. Post operatively the healing time, hemorrhage, and anal stenosis were assessed in both operative groups.

Methodology: Data was computerized and frequency tables generated.

Data Analysis: Test of significance:

Fisher's exact probability test.

Alpha level set at .05

Sample size: 50

Sampling procedure: Simple random

Inclusion criteria

Gender: Both males and females

Age groups: 15-90 years.

Condition: suffering from 2nd and 3rd degree hemorrhoids

Exclusion criteria

Age groups: <15->90 years

Patients with histories suggestive of other systemic diseases.

Patients suffering from peri-anal conditions such as fistulas, fissures and carcinoma colon.

Results

Table 1 Cross tabulation between the types of haemorrhoidectomy with the outcome (anal stenosis)

	Anal stenosis	Normal	Row total
Open haemorrhoidectomy	5 (a)	20 (b)	25 (e)
Closed haemorrhoidectomy	0 ©	25 (d)	25 (f)
Column total	5 (g)	45 (h)	50 Grand total 'N'

Null Hypothesis: There is no difference in the incidence of post operative anal stenosis in open as well as closed haemorrhoidectomy.

Alternate Hypothesis: The incidence of post operative anal stenosis is significantly high in open procedure as compared to the close one.

Fisher's exact probability test

One tailed P-value = 0.02

Two tailed P-value = 0.02

The finding is < .05

The finding is statistically significant. Therefore the Null Hypothesis is rejected and the Alternate Hypothesis is accepted at alpha level .05

Table Cross tabulation between the types of haemorrhoidectomy and occurrence of post operative Hemorrhage

	Hemor-rhage	No Hemorrhage	Row total
Open haemorrhoidectomy	6 (a)	19 (b)	25 (e)
Closed haemorrhoidectomy	1 ©	24 (d)	25 (f)
Column total	7 (g)	43 (h)	50 (N)

Null Hypothesis: There is no difference in the incidence of post operative hemorrhage in open as well as closed haemorrhoidectomy.

Alternate Hypothesis: The incidence of post operative hemorrhage is significantly high in open procedure as compared to the close one.

Fisher's exact test

One tailed P-value = 0.049

Two tailed P-value= 0.05

$P < 0.05$

The finding is statistically significant. The incidence of post operative hemorrhage in open procedure is significantly high than in closed haemorrhoidectomy. Therefore the Null Hypothesis is rejected and Alternate Hypothesis is accepted at alpha level .05

Table 3. Average healing time

Open haemorrhoidectomy	23.4 Days
Closed haemorrhoidectomy	12.2 Days

Discussion

The results of the study showed that the incidence of post operative anal stenosis and hemorrhage were less in closed

haemorrhoidectomy and the findings were statistically significant. The average healing time was less. The results are supported by Ui⁵ where out of 2000 patients none had anal stenosis or post operative bleeding and wound healing was shorter. However contrary result was obtained by Ho⁶ which revealed that open haemorrhoidectomy leads to faster and more reliable wound healing.

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