

FACE-MASK AS SCROTAL SUPPORT TO REDUCE INCIDENCE OF SCROTAL OEDEMA (POST INGUINOSCROTAL SURGERY)

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ABSTRACT

Scrotal edema after inguinoscrotal surgery is quiet common and various types of scrotal support have been used to decrease the incidence of scrotal oedema and haematoma. Edematous scrotum is a great source of infection due to rogosity of scrotal wall and due to lots of swept in tropical country like India. Various types of scrotal support like coconut scrotal bandage and triangular (LANGGOT) suspension of scrotum have been in use, with varying degrees of success in preventing such complications. We used Face-mask to suspend the scrotum to decrease the incidence of scrotal oedema in cases of all inguinoscrotal surgeries done in last year in a rural medical college.

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INTRODUCTION

Scrotal oedema and haematoma are cause of significant morbidity after various types' of inguinoscrotal surgeries. Various types of scrotal support have been in use, with varying degrees of success in preventing such complications. A prospective study was done in which a new method of scrotal suspension by using sterilized Face-mask was compared with conventional coconut bandage in preventing edema and haematoma. Sixty operated cases of complete inguinoscrotal hernia, sixty cases of hydrocele, twenty cases of varicocele and sixteen cases of scrotal injury were included in study

MATERIALS AND METHODS

A prospective study, new method of scrotal suspension by using sterilized face mask was used in 60 operated cases of complete inguinoscrotal hernia, 60 cases of hydrocele, 20 cases of vasectomy, sixteen cases of scrotal injury was carried out during Jun 2012 to May 2013.

All operated patients were divided in two groups A and B. In A group patient's scrotum were supported with sterilized Face-mask as shown in Fig-1 and patients in group B were managed with conventional sterilized gauze bandage (coconut bandage) as scrotal support. Children and patients with small incomplete inguinal hernia (Bubonocoele) were excluded.

In all cases, incidence and severity of scrotal haematoma and oedema were compared on 1st post-operative period, 2nd post-operative, 3rd post-operative day and 7th post-operative day.

Table-1 showing various groups of patients

Diseases	Sterilized Mask as scrotal support (Group-A)	Face scrotal support (Group-B)	Conventional coconut bandage as scrotal support (Group-B)
Inguinoscrotal Hernia	30		30
Hydrocele	30		30
Vasectomy cases	10		10
Scrotal injury cases	08		08

Incidence and severity of scrotal haematoma and oedema were compared on 1st, 2nd, 3rd and seventh post-operative day.

RESULTS-

The incidence of scrotal oedema and haematoma were found to be comparable in patients in whom the new scrotal support was used as compared to the patients with gauze bandage scrotal supports.

Complications Scrotal Wall Edema	Face Mask as support				Conventional coconut bandage			
	1 st day	2 nd day	3 rd day	7 th	1 st day	2 nd day	3 rd day	7 th day
Inguinoscrotal Hernia	+++	++	+	±	+++	++	+	±
Hydrocele	+++	++	+	±	+++	++	+	±
Vasectomy	+++	++	+	±	+++	++	+	±
Scrotal injury	+++	++	+	+	+++	++	+	+

Using the Face-mask was easy, non cumbersome and time saving technique without any learning curve. Usually conventional coconut bandage slips over rounded scrotum in postoperative period but displacement of Face-mask support can be avoided by adjusting the nose clip of Face-mask with perineum.

DISCUSSION

Incidence of scrotal haematoma and oedema are very high in case of complete sac inguinal hernia cases because sac has to separated from whole of spermatic cord starting from base of scrotum upto internal ring. There is always injury of small veinules and of lymphatics which results in haematoma and oedema of scrotum in postoperative period of inguinoscrotal hernia. Swelling is more in unsupported scrotum due to hanging and stretching which result in increased leakage of veinules and of lymphatics. Due to rogosity of scrotal wall, chances of infection is more in presence of oedema as proper cleaning is very difficult. Sweating and perineal bacterial flora can further increase the incidence of infection.

Purpose of scrotal support is to avoid stretching of spermatic and testis by antigravity suspension and also compressing the scrotal layers to decrease the incidence of haematoma and oedema of scrotum.

Most of time conventional gauge bandage (coconut bandage) is used but it is quiet cumbersome, dislodge easily and a learning curve is needed for a proper technique. By antigravity adhesive tape scrotal support, scrotum is only suspended but there is no compression of scrotal wall layers. In our method in which face mask is used to do antigravity suspension as well as compression of scrotal wall layers. It is a simple technique with comparable results without any learning curve. It is easily available in operation theatres.

Coconut bandage usually slip of scrotum due movements of legs in postoperative period. If adhesive tape is used at scrota-perineal junction to keep bandage in place, it can results in dermatitis and ulceration in perineum due to adhesive tape reaction. But in our study, Face-mask can be fixed in perineum with the help of nose clip and there was no incidence of dislodgement of Face-mask in postoperative period. As no adhesive tape was used to fix the face mask, so, no chances of dermatitis and ulceration in perineum. No doubt our is a small study but results are quiet encouraging.

It was easy for patients to use Face-mask as scrotal support instead of LANNGOT (triangular bandage is used as under garment in Indian rural male population) in post-operative period at home.

Fig-1 showing Sterile Face-Mask as scrotal suspension bandage



Fig-2 showing conventional coconut bandage



CONCLUSION

We conclude that use of sterile face mask to suspend scrotum after inguinoscrotal surgeries is an easy and quick method without any learning curve with equal efficacy as that of conventional coconut bandage. Patient can use Face-mask scrotal support in post-operative period at home instead of LANGOT.

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