

## **New method of inguinal hernia repair: A new solution: Reply**

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LETTER TO THE EDITOR

Dear Editor,

### **New method of inguinal hernia repair: A new solution: Reply**

I am thankful to Jones *et al.* for reading with interest my recent article.<sup>1</sup> I have gone through their comments carefully.

Contrary to the comment made by Jones *et al.*, the spermatic cord is not preserved subcutaneously but goes behind the external oblique aponeurosis (EOA).<sup>1</sup>

I have made a mention in the Methods section of my article that 'The author is aware that a 10-year follow up of 26.6% is not enough, but this is not a sufficient reason for ignoring the results of the present series. Publication of these data may encourage others to conduct more trials to prove or disprove these results.' In spite of the best efforts, poor follow up is seen in all the underdeveloped countries because the cost and transportation act as deterrents. But all the patients do come for examination to the operating surgeon even after 10 years of operation if there is any problem. This is because medical practice in India is more personalized to doctors in the absence of health insurance schemes. As yet no such patients have come to me with recurrence or any other complaint.

Shrinkage of mesh *in vivo*, as one of the causes of failure of mesh repair, was recently reported by Lichtenstein, the original author of the mesh repair, in 1997.<sup>2</sup>

I have given evidence in my article that the chronic groin sepsis following mesh repair is more frequent than reported previously.<sup>2</sup>

An editorial in *Annals of Surgery*, January 2001, raised the question of whether the changed techniques of hernia repair in recent years, mainly implanted mesh, have caused a rise in the incidence of chronic groin pain from 1% to 28.7% after hernia repairs.

Several authors have suggested that alterations in collagen synthesis may be responsible for the development of inguinal herniation.<sup>4,5</sup> This is true in the hernia repairs such as the Bassini and the Shouldice, which use weakened internal oblique and transverse abdominal muscles for repair. Supporters of mesh prostheses claim that the mesh repair is superior to other operations in this aspect. The theory of mesh repair is based on fibroblast proliferation in the mesh; the degree and magnitude of fibroblast proliferation are also affected by the ageing process. This ageing process has less effect on the tendons and aponeurosis so a strip of the external oblique, which is aponeurotic, is the best alternative to the mesh. Pure tissue is preferred to a mesh for repair if it gives the desired results.

The Johns Hopkins, Halsted or any other repairs referred to by Jones *et al.* in their comments are in no way similar to my operation. None of them have ever used the strip of EOA as described in my article, and no operation described to date has ever used the concept of giving additional muscle strength to the weakened muscles of the inguinal canal. The sutured strip of EOA, in my operation, becomes an independent entity as the posterior wall of the inguinal canal. This posterior wall is strong because of the nature of the tissue and it is also kept physiologically dynamic by the additional muscle strength of the strong external oblique muscle. Interestingly, in many cases the internal oblique muscle, which did not show any movements when the patient was asked to cough while on the operating table before the strip of EOA was sutured behind the cord, showed improved or good movements after the strip was sutured. This may be because of the new anchorage received by the internal oblique muscle arch to the upper border of this strip. Providing a strong and physiologically dynamic posterior inguinal wall should be the principle of any inguinal hernia repair. This principle is observed in my operation technique and because of this it gives a recurrence rate of almost zero. Pure tissue repair and simplicity of operation are other important features of this operation. The cost involved in purchasing and maintaining sophisticated equipment is avoided and the expertise in hernia surgery required to carry out complicated dissection or handling of such equipment is also not required.

I am in agreement with Jones *et al.* that the preperitoneal or intermuscular prosthetic grafts give good results and are front-line therapy in the Western hemisphere. Twenty per cent of the world population lives in the Western hemisphere. I am thankful to Jones *et al.* and others for accepting my operation of inguinal hernia repair as an alternative to a mesh repair for the rest of the world, which has the remaining 80% of the world population.

Nicholson, in his leading article on inguinal hernia repair in *British Journal of Surgery* (1999) states that:

"With over 80 000 groin hernia operations carried out in the UK alone each year, and a deepening crisis in surgical manpower resulting from increased surgical subspecialization and greater public and political demands for quality in surgical practice, inguinal hernia repair will remain for the foreseeable future a procedure likely to be delegated to non-consultant staff. It is essential therefore that we design safe and simple pathways for managing these patients."<sup>[6]</sup>

I designed this safe and simple pathway of groin hernia repair, as expressed by Nicholson, not only for the underdeveloped countries but also for the people of the UK or the Western hemisphere.

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