

**Aponeurosis instead of prosthetic mesh for inguinal hernia repair:
neither physiological nor new**

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To The Editor:

We read with interest Desarda's recent article describing a new method of inguinal hernia repair [1]. The author discusses the use of a medially based longitudinal strip of the external oblique aponeurosis to reinforce the inguinal floor. The aponeurosis is sutured laterally to the inguinal ligament and medially to the internal oblique arch, behind the spermatic cord. The method was used in 860 patients, 72,5% of whom were followed up by clinical examination or questionnaire at more than 7 years after surgery. Dr. Desarda observed no recurrences or postoperative neuralgia and concluded that his results were superior to those previously published in the field of surgery [1].

The early results of Dr. Desarda's study were reflected in two simultaneously published articles that he authored [2,3]. Each of the two articles discussed 400 patients operated on between 1983 and 1999; the first article reported 80 [2] and the second 106 [3] patients followed-up for more than 10 years. The second paper [3] was not quoted in Desarda's most recent article published in Hernia [1]. Desarda claimed that the 860 patients reported in his most recent article represented the second series in which his aponeurotic repair was used (1990-2003). The overlap in follow-up time among the series is confusing and demands an explanation of the actual number of patients enrolled in the study, and the follow-up methods used by the author.

We find no evidence to support Dr Desarda's contention that his results are superior to that of previously published series of mesh repair. Modern monofilamented prosthetic materials resist infection, have a negligible suppuration rates, and excellent tissue incorporation [4-6]. Desarda's claim that the external oblique aponeurosis is the best alternative to mesh [1] is not based on a solid scientific foundation. The recent literature on hernia shows that it is the pathological changes in collagen, a genetically predetermined lifelong risk factor [7], that sets the stage for the development of a hernia [8-10]. Numerous comparative randomized trials have clearly demonstrated the superiority of the tension-free mesh repair over the traditional tissue approximation method; level A evidence from randomized

comparative studies shows that mesh repair is superior to pure tissue approximation repairs, and mesh implantation in front of the transversalis fascia is safe and easy [11]. The literature suggests that 50% of inguinal hernia recurrences first appear 5 years after surgery; a 10-year follow up provides a reliable measure of a repair's durability [4]. Nearly 28% of Desarda's patients were followed-up for less than 8 years, and he also used phone interviews, a notoriously misleading method [12]; these methodological problems preclude comparison of the Desarda study to recent large series utilizing mesh, a gold standard in the modern understanding of hernia [13].

Desarda does not discuss the details of other techniques utilizing the external oblique aponeurosis to reinforce the inguinal floor. A number of such repairs described in Iason's classic 1941 text are similar to method utilized by Dr. Desarda's [14]. The so-called "Johns Hopkins repair" utilizes a relaxing incision of the anterior rectus abdominis sheath and suturing it to the inguinal ligament supported by an imbrication of the external oblique aponeurosis [15]. Madden [16], Koontz [17], Calman [18], and Halsted [16] all describe variants of inguinal floor repair similar to the one described in the Desarda articles [1-3].

Desarda's incomplete follow-up results and the available literature [4-13] do not support a conclusion that using the external oblique aponeurosis for inguinal floor reinforcement is superior to the more widely utilized mesh hernioplasty. Although many of the endogenous repair methods might be used alternatively to mesh in parts of the world where prosthetic materials are not available, they cannot become standard in the Western world.

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