

Letter to the Editor

More Respect for Anatomy in Hernia Repair, Please!

To the Editor, *Clinical Anatomy*:

For more than 60 years, medical students and young doctors have learned inguinal anatomy from anatomy textbooks and hernia reference books that contain errors with regard to major structures of the inguinal canal, which are essential for correct hernia repair. Patients or family practitioners may have wondered why, after hernia repair, patients are sometimes painfully bent forward in the vertebral column. Robert Acland, Professor of Surgery at the Department of Surgery, University of Louisville, Kentucky (2008), has commendably pointed out the fact that it has been known for 60 years that the obliquus internus and transversus abdominis muscles do not attach to the inguinal ligament, but to a thickened band of the ilio-psoas fascia, as published by McVay and Anson (1940) and Condon (1964). I take this opportunity to discuss, in a compact way, these findings, which should gain acceptance in modern textbooks. For example, the latest editions of German textbooks of anatomy (Thiel, 1996; Benninghoff and Drenckhahn, 2002; Lippert, 2006), textbooks of surgery (Breitner, 1997), and hernia reference books (Schumpelick, 2000) still contain the wrong anatomical description, whereas Sabistons textbook of surgery (Turnage et al., 2004) contains the correct description.

Critics have noted that anatomical descriptions may sometimes be misleading or erroneous (Lytle, 1979). However, in recent years, some surgeons have praised the renunciation of anatomical dissection of the groin in hernia repair as progress—"We believe that ... decreased dissection are the most important reasons for greater patient comfort" (Rutkow and Robbins, 1993). It cannot be ignored that this exact philosophy may have led to a lower familiarity with groin anatomy among residents in surgery (Banks and Cotlar, 2005). This lack of anatomical knowledge and the pushing through of certain hernia techniques for all patients—no matter what individual situation may be present—may be responsible for the occurrence of some of the complications which were discussed in relation with these techniques (LeBlanc, 2001). Nowadays, surgeons are suffering from severe time restrictions in the operating room and are looking to find time-saving operating techniques (e.g., those that last 20 min or less) (Millikan et al., 2003). Unfortunately for both patient and doctor, careful anatomical dissection is time consuming, even though it is the best method

of preventing recurrence and complications (Lowham et al., 1997; Shouldice, 2003; Banks and Cotlar, 2005). This reductional surgical groin philosophy may tempt the surgeon to think that he/she can solve the patient's groin problems by a simple "fill-the-gap-technique," be it from inside (TEP-TAPP) (Totte et al., 2005; Vidovic et al., 2007) or from outside (Mesh-Plug) (Rutkow and Robbins, 1993; Jeans et al., 2007), but in the case of anatomical variations and/or invisible changes of anatomical structures, this may not be a sufficient technique. Long-term pain and reduced quality-of-life for the patient will follow (Holzheimer and Gresser, 2007). We should not forget that the anatomical-physiological dissection and repair of the groin hernia represents the traditional heritage of scientific surgeons over the past 100 years (Nyhus, 2004). The appreciation of this may preserve the valve function of the inguinal canal (Cherner, 1934; Desarda, 2003), prevent hernia recurrence and complication, and give the patient a higher quality-of-life without chronic pain. That is why attention should be given to the individual variation in groin anatomy (Stolic, 1977), and the technique should remedy the structural failure rather than adhere to the surgical routine (Cherner, 1934). As Koontz (1956) advised, "Make the operation fit the patient. Don't try to make the patient fit the operation."

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Received 26 October 2007; Accepted 12 November 2007

Published online 31 December 2007 in Wiley InterScience (www.interscience.wiley.com). DOI 10.1002/ca.20575

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