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INVITED COMMENTARY

Inguinal Hernia Repair: What to do with the Evidence?

René Gordon Holzheimer

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Inguinal hernia repair, one of the commonest operations in the world, remains a matter of discussion and controversy with regard to which technique should be used. Each of us is convinced that his or her technique is the best one. Numerous published guidelines and meta-analyses of hernia repair are available; do surgeons follow them?

In this issue of the *Journal*, Dr. Bernhardt and his colleagues from Styria, Austria conducted a study to determine whether surgeons in their area practice as the guidelines and meta-analyses indicate they should [1]. Fifteen surgical departments participated and reported on 2,441 hernia repairs. Five different methods were used; laparoscopic hernioplasties accounted for 36.8% and suture repairs—yes, often the good ancient "Bassini"—for 19.9%. The Austrian group concluded that surgeons in their locality tend not to adhere to "evidence" or "guidelines" when choosing how to repair the humble inguinal hernia.

One could have argued that this is a regional problem and suggest: "let them publish that data in one of their Austrian journals." However, it is not, as I will try to demonstrate below, and I am happy that the Editors agreed to share this with the international surgical readership.

More than 90% of hernia repairs in the United States are performed as open mesh procedures on an outpatient basis [2]. There are similar counts for Wales and the United Kingdom [3, 4]. However, in Germany 25% of groin hernias are repaired using a suture repair technique [5]. In addition (in 2003) 26.9% of hernias in Germany were repaired laparoscopically [6]. Recently, at the German National Surgery Association Meeting in Munich (2009), it was reported that approximately 35–40% of hernia procedures are performed laparoscopically (personal communication).

Why is "the evidence" not travelling eastward across the English Channel or the Northern Sea into German-speaking lands? It may be that this is an issue of culture: Germany and Austria have a history of "Surgical Schools" (*Schule*), whose founders or directors impact strongly on the prevailing operative methods—including that of hernia repair. However, also in other European countries the "evidence" seems not to be adhered to. For example Wijsmuller et al. observed that there has been a substantial disparity between the state-of-the-art Lichtenstein repair and its application in general practice in the Netherlands [7].

We all know that many studies comparing different methods of hernia repair are performed in specialized centers—a fact that may influence the outcome compared with studies performed in the community [8]. The hernia discussions at surgical meetings in Germany are characterized by constant debate between the proponents of laparoscopic vs. suture technique vs. open mesh techniques—with each "expert" trying to convince the audience that his technique is better by demonstrating what he claims to be "evidence." Some surgeons realize that guidelines often are contaminated by para-scientific factors or that the grade of evidence may not be uniformly solid [9, 10].

What follows is that the operating surgeon prefers to avoid the controversy by continuing to adhere to his "departmental policy." Although surgeons may perceive that evidence-based medicine mandates a strict adherence to randomized, controlled trials, it involves informed and effective use of all types of evidence [11]. The decision to use Bassini repair or to apply laparoscopic hernia repair to every primary inguinal hernia is not necessarily supported by evidence-based medicine. However, explain this

R. G. Holzheimer (✉)
Hernia Clinic Sauerlach, Munich, Germany
e-mail: RGHolzheimer@t-online.de
URL: www.praxisklinik-sauerlach.de

to those who still believe that the chief (*Chefarzt*) is always right (eminence-based medicine vs. evidence-based medicine).

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