Reply to Dr Bendavid’s letter:
mesh hernia repair is not
perfect but it is currently the
best treatment available

Steven Kelly

Dr Bendavid’s letter\(^1\) implies that no hernias should be repaired with mesh. He hasn’t defined in his statements the difference between ventral and groin hernia. I agree that if a hernia can be repaired reliably without mesh then they should be. The best example of this is a small ventral hernia such as umbilical hernia, which can be sutured with success. However, the case for mesh in the repair of medium to large ventral abdominal wall hernia (fascial defects larger than 3cm) is very strong. The suture repair of these is almost futile without the use of tissue reinforcement.

Dr Bendavid’s claim that the Shouldice open inguinal hernia repair is superior to mesh repair is not supported by the best available level 1 evidence in the literature. In 2012, the Cochrane collaboration published a systematic review of 16 randomised control trials with a total of 2,566 hernias comparing Shouldice repair to other mesh and non-mesh inguinal hernia repair. They found that the Odds ratio for Shouldice hernia recurrence was 3.8 compared to mesh repair. Importantly there was no difference between the techniques in chronic pain, complications and hospital stay.\(^2\) Only one of the 16 studies were performed in a specialised hernia centre. The rest were performed by general surgeons who performed many different operations, which included hernia repair. This situation most closely represents the real-world environment.

So why are the Shouldice clinic reported results better than the randomised control trials? There are two main explanations. Firstly, the results may be better because the surgeons are specialist hernia surgeons as compared to the real-world environment of general surgeons. The other explanation may be case series publication bias. It is well known that randomised control trials are the best form of unbiased evidence.

In regard to the surgical removal of hernia mesh for complications, this should be performed by an expert herniologists of which there are a number in New Zealand.\(^3\) Although this surgery is difficult and complex, the results in many cases are successful.

Dr Bendavid claims that there are 120,000 people in the US each year who develop chronic pain after mesh inguinal hernia repair. Given the results of the randomised control trials there would be an equivalent number of patients with chronic pain even if the operations had been performed with Shouldice technique. The Shouldice technique is a four-layer darn of stainless steel wire. This conceptually is a stainless-steel mesh that is formed in situ. This would explain why there is no difference in chronic pain with the randomised trials.

It is an unfortunate fact that chronic pain develops post-operatively in 10—50% of patients after many common operations. These operations include mastectomy, cardiac surgery, hysterectomy, joint replacement, back surgery and even after minor surgery.\(^4\)

To progress hernia surgery in the future and improve patient outcomes we need more high-quality randomised control trials with a focus on patient-centred outcomes. Relying on case series and anecdote will not progress surgery.
Competing interests:
Nil.

Author information:
Steven Kelly, Department of Surgery, Christchurch Hospital, Christchurch.

Corresponding author:
Steven Kelly, Department of Surgery, Christchurch Hospital, Riccarton Ave, Christchurch 4710.
steven.kelly@cdhb.health.nz

URL:

REFERENCES:
1. Bendavid R. Mesh abdominal wall hernia surgery is safe and effective—the harm New Zealand media has done: response to Dr Steven Kelly's article. N Z Med J. 2017; 130(1467):97–98.