Mesh abdominal wall hernia surgery is safe and effective—the harm New Zealand media has done: response to Dr Steven Kelly’s article

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I have read with interest, but also a degree of disappointment, the article by Dr Steven Kelly from Christchurch.1 There are several errors:

Synthetics were discovered before WWII, more exactly Nylon in 1935 (Carothers at Dupont) and was used in the first description of a true tension free repair by a French surgeon Don Aquaviva from Marseille, France in 1944.2 The Lichtenstein repair brought nothing new!

Subsequently, nylon was re-used by Henri Fruchaud in 1956 in a technique which has been known more recently as the Rives-Stoppa repair for inguinal hernias.3

There have been dozens of reports of chronic pain following all types of hernia repairs, from Denmark, Sweden, Canada, the US and many other countries.4,5 Though such statistics range from 0 to 60%, the most reliable, rigorous reports place the incidence at 12%. This means that in the US alone, there are, conservatively, 120,000 patients who will be exposed to life-altering changes every year. This is a high incidence, which must be outlined to patients so that they may decide whether the risks are too high.

We have presently collected within our practices (US, Canada and Germany), 2,400 mesh explants due to severe chronic post-herniorrhaphy pain for which we have reported preliminary studies.6,7 This pain syndrome was non-existent prior to 1995 as quoted in Lloyd Nyhus classic textbook on hernias,8 and Joseph Ponka’s.9 Ponka mentions ilioinguinal and genitofemoral involvement in scar tissue and entrapment as a cause of pain (pages 601–602).

The European Hernia Society World Guidelines (which have not yet been updated officially since 2009) have been severely criticised at the last meeting of the Americas Hernia Society in Cancun (March 2017). The criticism was even more evident at the last conference of the European Hernia Society in Vienna this year (May 2017). A sad sequel of this mesh invasion is that it is difficult today to find a surgeon who can do a pure tissue repair. It seems that we have lost a whole generation of surgeons to the industry. No doubt, our universities must take the brunt of the blame.

Dr Kelly emphasises that repairs with mesh have reduced the incidence of recurrence. This is not corroborated by David Urbach who, last year, analysed 235,109 hernia repairs in Ontario, Canada in a 14-year study with an additional two-year follow-up. This study was carried out to compare the Shouldice repair with the meshes used throughout the province. The patients treated with mesh showed on average, a four- to five-times increase in the incidence of recurrences than observed at the Shouldice Hospital.10 Our hospital was never involved directly in the study, which was based on the data of our state-run health system!

In that same time period, mesh was used at the Shouldice Hospital in 1.46% of the cases. The main asset of the Shouldice surgeons is that they know the anatomy of the groin.

What is becoming more evident nowadays is that many surgeons are not familiar with the process of mesh removal. It can be tedious, difficult and dangerous, especially when the meshes have been inserted.
laparoscopically, which makes the surgery essentially irreversible because of adhesions to adjacent vital structures! Most surgeons will avoid the challenge and obligation by referring patients to pain clinics and eventually to psychiatrists.

It has been a habit of the industry that, when a problem arises, changes are brought in which ‘resolve’ the issues. This is why we have seen the introduction of so many varieties of lighter meshes, larger pores, various resorbable coatings on the polypropylene mesh (Vicryl, Omega-3 fatty acids, etc). But in fact nothing new has been introduced since it is and always will be polypropylene once its added coats have been digested away.

If the various meshes were as safe as the industry claims them to be, why are there hundreds of thousands of patients involved in class actions, resulting in billions of dollars in fines? Not only for pain and suffering but punitive damages to an industry which has been less than forthright. Neither the industry nor the FDA, nor any world organisation that I am aware of is keeping track of such complications. If one looks at the FDA website, a patient must have died, or come close to death before it is registered by the FDA!

Whether mesh is used in vaginal surgery, pelvic organ prolapse or hernias, the pathology is the same. Women are exposed to earlier complications because of the nature of the thin vaginal wall allowing earlier erosions, breakthrough, recurrent infections, bleeding and pain.

Karl Ziegler and Giulio Nata were awarded the Nobel Prize in Chemistry in 1963 for the discovery of Olefins (of which polypropylene is one). I do not foresee a Nobel Prize in medicine for the use of polypropylene meshes in trusting and unsuspecting patients.