Some hernias are large and complex. Incisional hernias can be complicated by multiple adhesions or by infection, and large parts of the abdomen can become scarred. Scar tissue is inflexible and the skin can become tight and uncomfortable while the underlying muscle becomes weaker and more prone to failure.

Repairing the hernia
Surgery to repair a complex hernia usually involves an open hernia repair with biological mesh placed internally. Given the fact that the mesh sits in close proximity to the bowel, we use a special composite mesh that doesn’t cause dense adhesions or damage to the bowel.

If previous contamination or infection is present we use biological mesh that is more resistant to infection. Large areas of mesh may be needed and these are sewn into place using tension-free techniques so that the internal organs are all fixed back into place. This method can be used even when the original hernia repair has become infected.

Over time, the biological mesh becomes part of the body’s tissue and is slowly broken down and partially absorbed.

Reconstructing the abdominal wall
The muscles that retain all the intestines inside the abdomen can be reconstructed by restructuring the way the muscles are attached. Often people with recurring hernias have a general problem with their body wall; reconstructive surgery can reattach the muscles to the midline, tightening and reinforcing it so that the body wall provides greater support.

This is a technically demanding operation that needs input from an experienced multidisciplinary team that can combine general surgery together with plastic reconstructive surgery. The two-surgeon team works together to spread out the healthy muscle layers in the abdomen to counteract the weakening caused by scarred layers of muscle.

The end result is a dynamic girdle of muscle that prevents new hernias forming.

The component separation technique
One of the main techniques used when reconstructing the abdominal body wall is to create muscle flaps from the healthy portions of the rectus abdominis muscle, the large muscle that runs down the front of the belly. In athletes, this muscle forms the six-pack.

Layers of healthy muscle are carefully separated and large areas, as wide as 10 cm, can be moved across to replace damaged muscle. These muscle flaps are still attached to their original blood supply and nerves, so they graft well into their new position.

Plastic surgery for a good cosmetic outcome
Once the underlying muscle layers have been reconstructed, the surgical team turns its attention to the skin. Multiple surgeries can leave scarring in the skin with tightening and thickened areas and unsightly bulges.

Someone who has had multiple hernias with failed repairs often needs major reconstructive and plastic surgery to improve their quality of life. Total Surgery offers full cosmetic reconstruction of the abdomen in conjunction with the component separation technique to ensure that the end result looks as good as possible once healing has taken place.