

## Biological Mesh and its role in closure of an open abdomen

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### Introduction:

There is a significant portion of patients post emergency laparotomy where closure of the abdominal fascia is not possible. This cohort of patients present a difficult clinical conundrum in which other closure options must be explored.

Biological mesh has been found to have potential benefits over synthetic meshes when looking at closure of difficult or potentially contaminated surgical sites. This study will explore its role in the closure of an open abdomen.

### Aim:

To explore whether biological mesh has a role in closure of the open abdomen

### Method:

A literature review was performed looking at the recent articles published about biological mesh in the closure of an open abdomen and their outcomes.

### Results:

The evidence of the benefits of biological mesh is conflicting. Most studies are case and cohort studies and are not of high enough quality to draw significant conclusions. Some studies suggest a benefit of biological mesh in contaminated wounds, however a decreased benefit in closure of wounds under high tensile stress. There is no strong evidence to support the use of biological mesh in the closure of an open abdomen, over other forms of closure, in improving patient outcomes.

### Conclusion:

Further research and randomised control trial results are needed to determine if the use of biological mesh has a benefit in the closure of an open abdomen.

### Biography

Dr Courtney Holinger is a [General Surgery](#) registrar at Albury Wodonga health in NSW, Australia. She has an MD from the University of Notre Dame Sydney. She has a strong interest in region and rural surgery.