
Brad Dennis
Ideal mesh

- Chemically inert, non-carcinogenic
- Sterilizable
- Resists mechanical stress
- Resists infection
- No inflammatory or foreign body response
- Allows for tissue ingrowth
- Resists actions of body fluids
- Easy to work with
- Cheap
How does it work?

- Acellular, porous extracellular matrix scaffolds
- Collagen, elastin
- Growth factors promote ingrowth of endothelial cells and fibroblasts
How does it work?

• Cycle of degradation of mesh and regeneration with host collagen tissue

• Crosslinking bonds in graft that slow down degradation and result in stronger host collagen framework
When do I use it?

- Contaminated setting
- Ventral hernia
- Prophylaxis during stoma creation
  - 77% reduction in parastomal hernia risk
- Hiatal hernia
- Complex abdominal wall reconstruction
- Breast reconstruction

What are my options?

- Acellular human dermis
- Acellular porcine dermis
- Acellular porcine small bowel submucosa
- Bovine dermis (fetal)
- Bovine pericardium
- Synthetic bioabsorbable
Who makes it?

- Acellular human dermis
  - Alloderm®, FlexHD™, Allomax™
- Acellular porcine dermis
  - Strattice®, Permacol™, Collamend™, XenMatrix™
- Acellular porcine small bowel submucosa
  - Surgisis®
- Bovine dermis (fetal)
  - Surgimend®
- Bovine pericardium
  - Periguard®, Tutopatch®, Veritas®
- Synthetic bioabsorbable
  - BioA®, TIGR®