Hospital Variation in Use of Biologic and Biosynthetic Mesh for Clean and Clean/ Contaminated Ventral Hernia Repair

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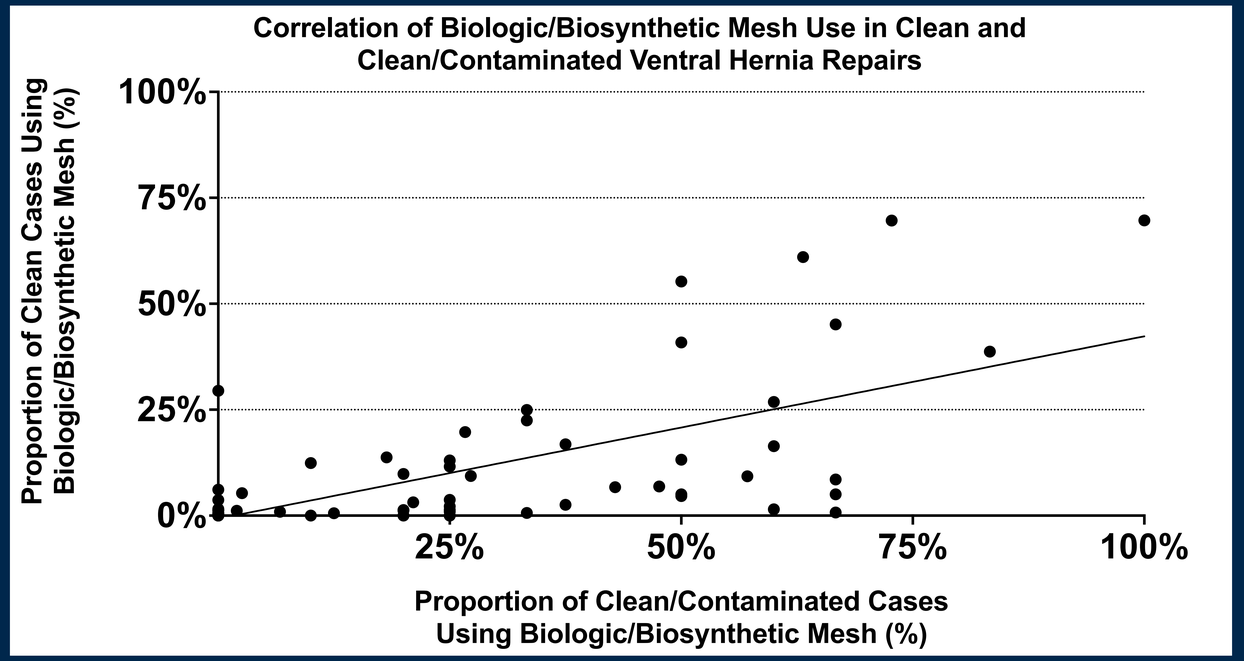
Introduction

The use of biologic and biosynthetic mesh in ventral hernia repair is a controversial topic. Specifically, there is growing evidence that it is associated with worse outcomes and higher cost compared to synthetic mesh for clean and clean/ contaminated her repairs.

However, current trends in its use for these cases remain poorly understood.

Hospitals **more likely** to use biologic and biosynthetic mesh in clean/contaminated wounds are **more likely** to use it in clean wounds as well.



Methodology

- **Design**: Retrospective cohort study
- **Study cohort**: adults undergoing ventral hernia repair with CDC Class I and II wounds
- **Main outcome**: mesh type (biologic/biosynthetic vs. synthetic)
- **Analysis**: Between-hospital variation in biologic/biosynthetic mesh use across cases.

Results

- 15,830 patients, 62 hospitals
- Mean age 56 years, 58% male
- Mean hernia width 3.8 cm
- Biologic/biosynthetic mesh used in **9.7%** of clean repairs and **23.7%** of clean/contaminated repairs
- At the individual hospital level, there was a **strong correlation** between using biologic/biosynthetic mesh in one wound classification and using it in the other wound classification as well (β=0.633, P<.001).