Trends in the Use of Biologic and Biosynthetic Mesh for Clean and Clean/ Contaminated Ventral Hernia Repair

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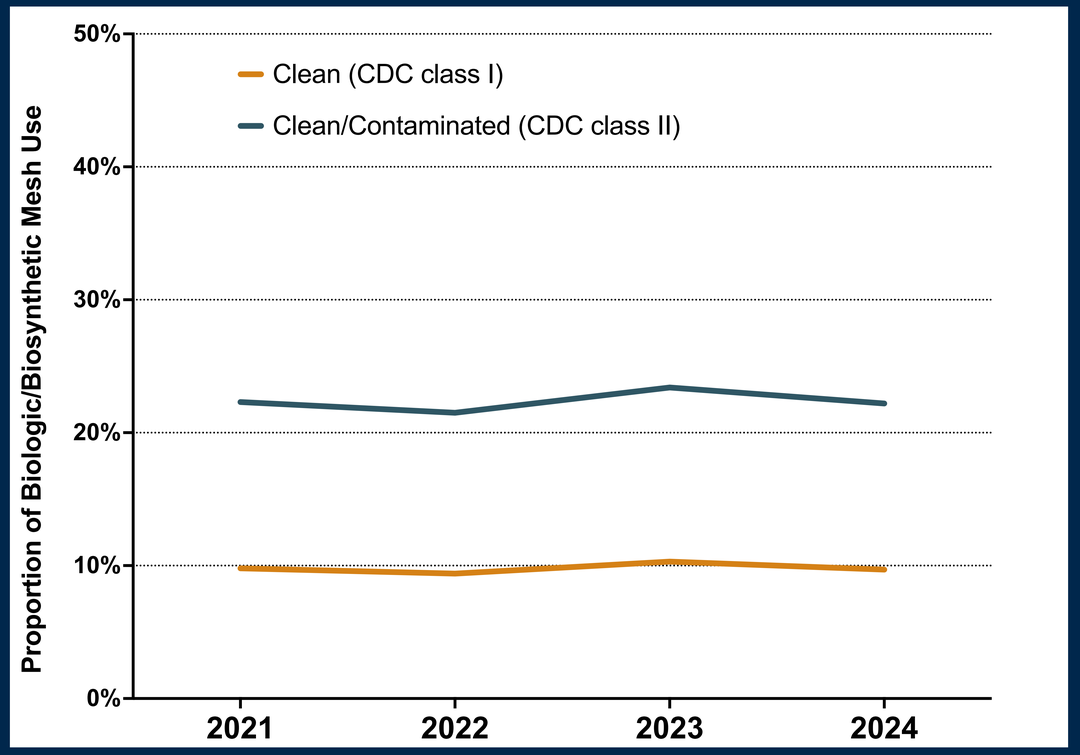
Introduction

In recent years, several randomized trials have demonstrated that biologic and biosynthetic mesh is associated with worse outcomes and higher cost compared to synthetic mesh for patients undergoing clean and clean/ contaminated ventral hernia repair.

However, it is unclear whether clinical practice has changed in accordance with this evidence.

Despite growing evidence of its inferior outcomes, use of **biologic** and **biosynthetic** mesh has **remained stable** in recent years.



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**: Multivariable logistic regression to evaluate trends in mesh type over time

Results

- 15,404 patients
- Mean age 56 years, 58% male
- Mean hernia width 3.8 cm
- Biologic/biosynthetic mesh used in **9.7%** of clean repairs and **23.1%** of clean/contaminated repairs
- Over time there was **no significant change** in the proportion of repairs performed with biologic/ biosynthetic mesh for either clean (P_{trend}=0.836) or clean/contaminated (P_{trend}=0.872) hernia repairs.