

Evaluating Post-operative Wound Infections In Patients Undergoing Major Laparotomy Procedures In Gynaecology

Aneela Ambareen¹, Mr Viren Asher²

¹Sherwood Forest Hospitals NHS Foundation Trust, Sutton-in-Ashfield, UK

²University Hospitals of Derby and Burton NHS Foundation Trust, Derby, UK

Objective

Major Laparotomy is associated with increased risk of Surgical Site Infection (SSI) hence an audit to evaluate the incidence of SSI and mitigating factors.

Design

- Objective comparison of SSI rates between non-malignant Gynaecology and Gynae-oncology laparotomy cases at Gynae-Oncology referral centre.
- Standards: NICE guideline: Surgical site infections: Prevention and Treatment– <https://www.nice.org.uk/guidance/ng125>

Methods

- Tracked patient factors, intraoperative details, dressing types, and complications till Day 15 post-op

Retrospective audit over 6 months (July 2023–Dec 2023)

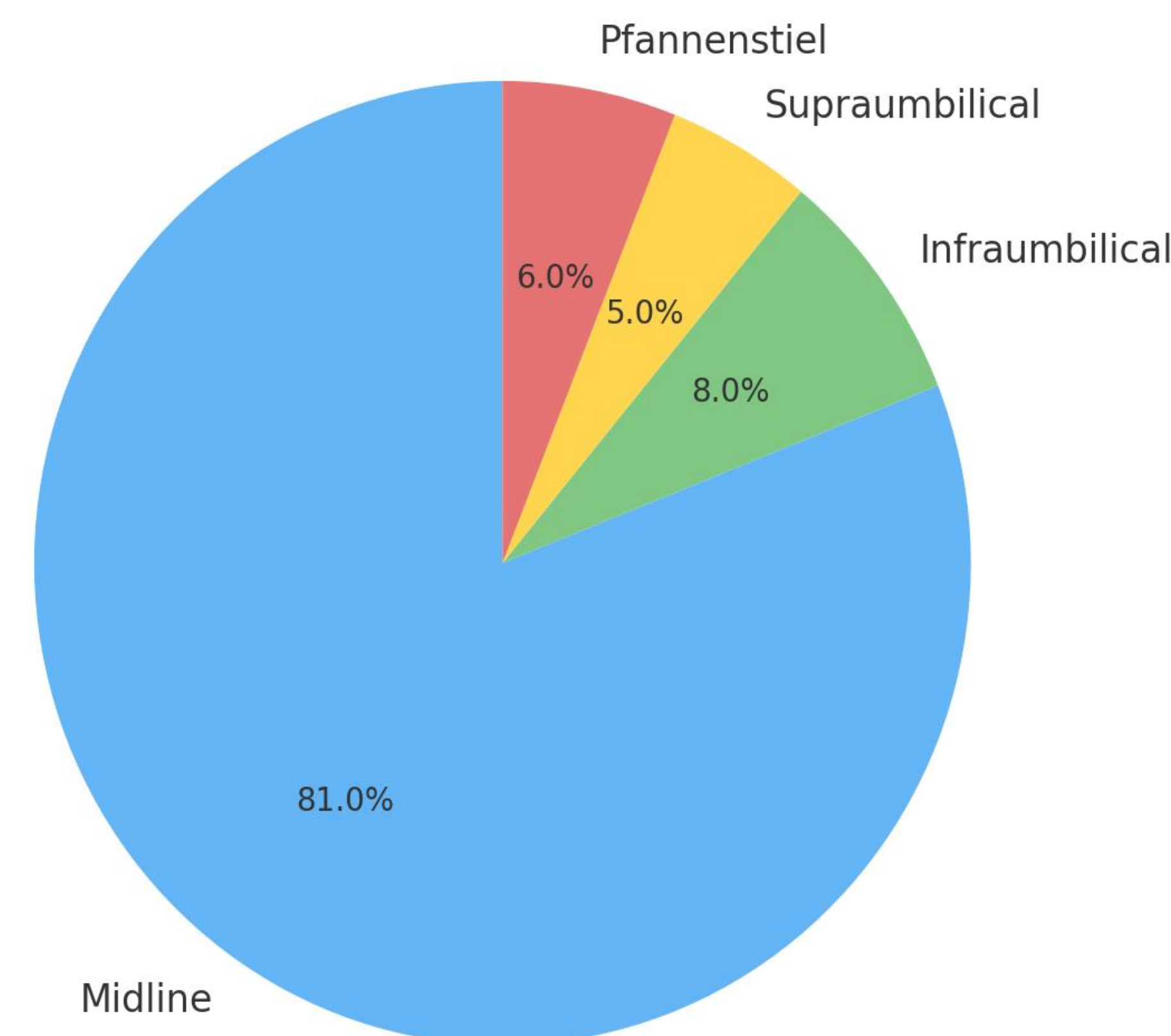
Sample size: total notes retrieved:40 using Picklist Procedure 'laparotomy',

4 notes excluded out of study range after manual selection and review.
Final sample size: n=36 (20 oncology,16 nonmalignant).

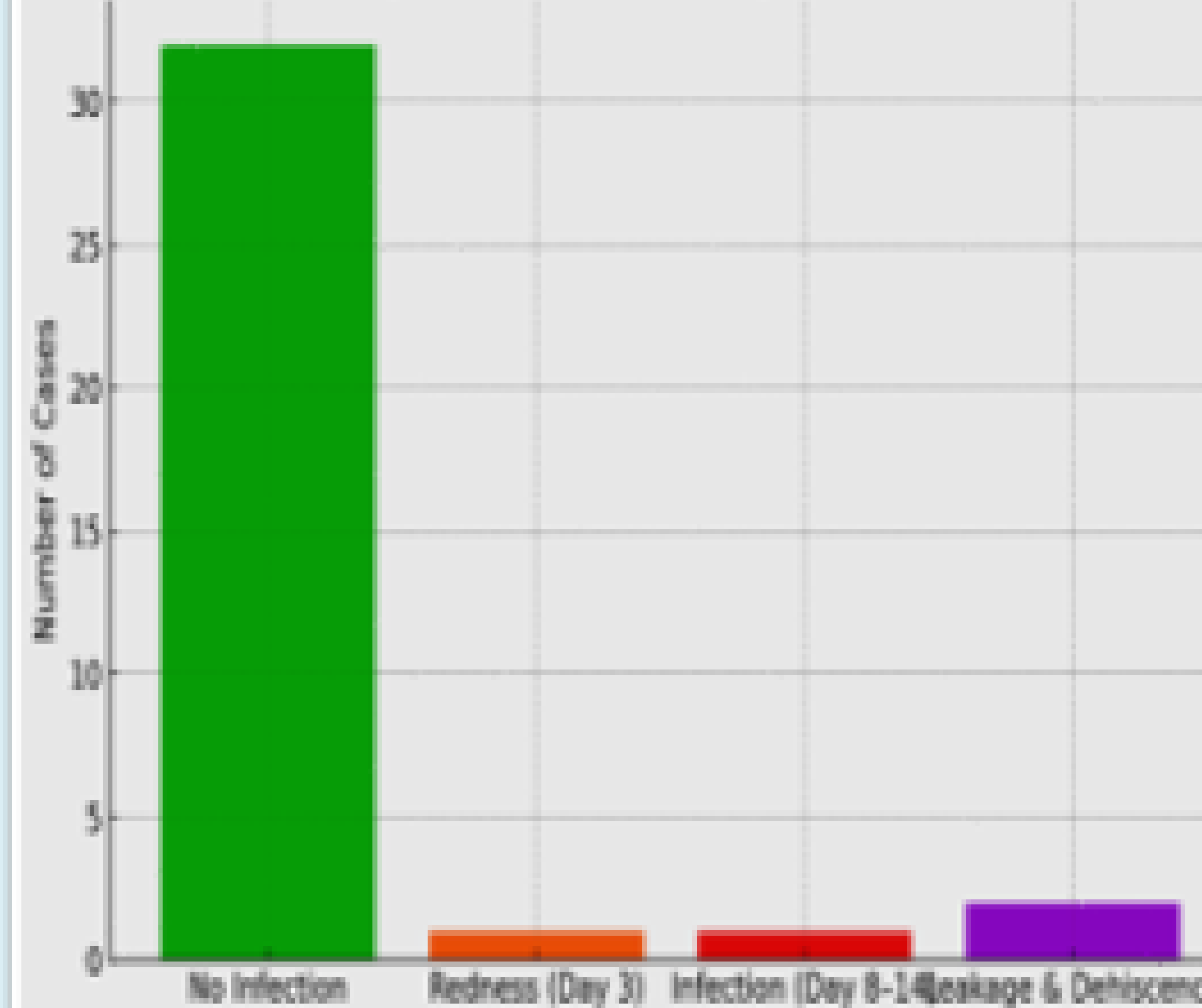
Data sources: ORMIS, Lorenzo

Results

Incision Type Distribution



Post-operative Wound Complications (n=36)



Age range: 23–83 years old
BMI range: 19-43.5

Previous surgeries: 17 cases
Smoking n= 4

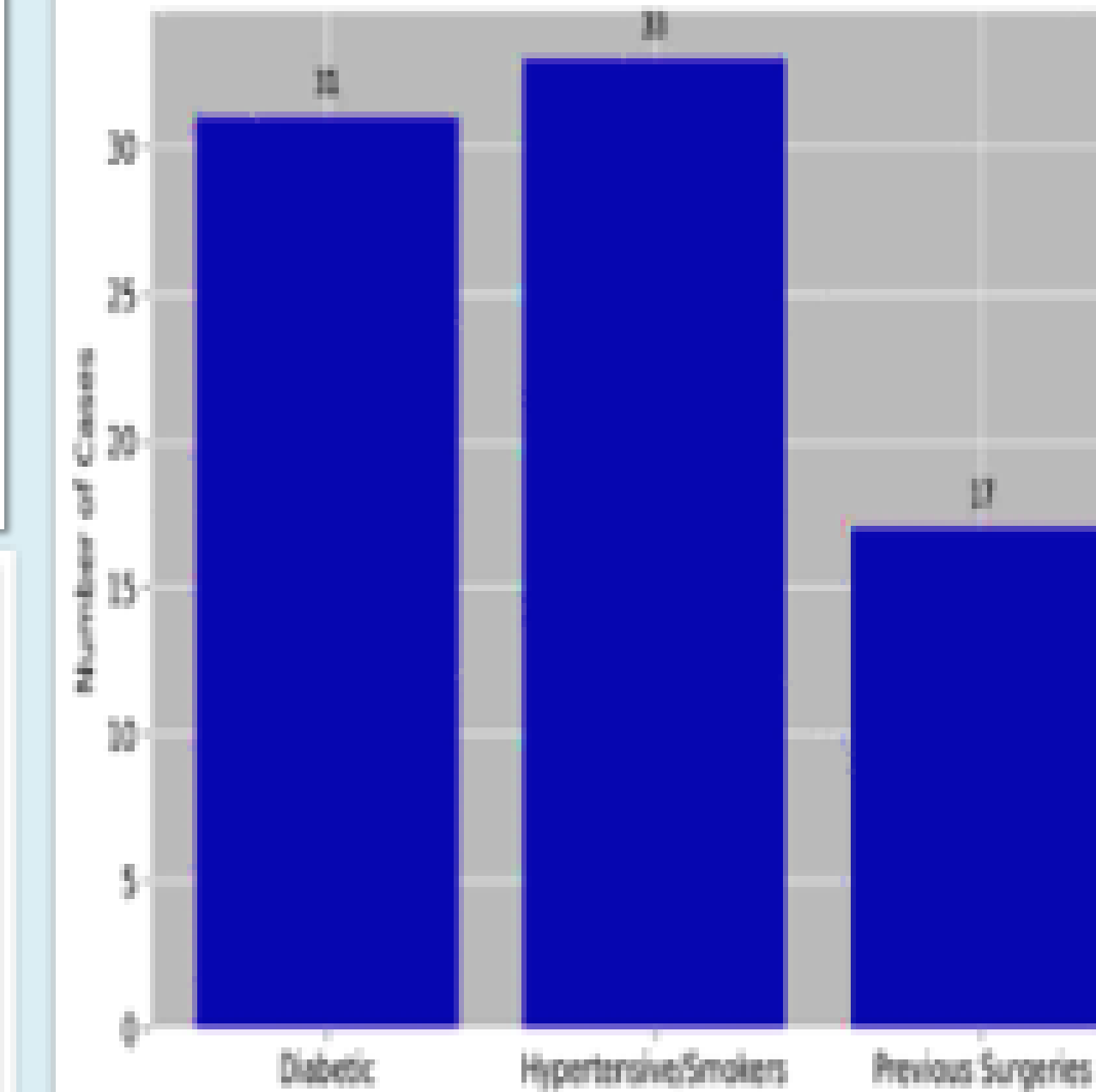
Serum Albumin levels: 13- 44

Wound infections: 4 (11%) Oncology cases (redness n=1,infection, n=1,leakage/dehiscence day 10:n=2)

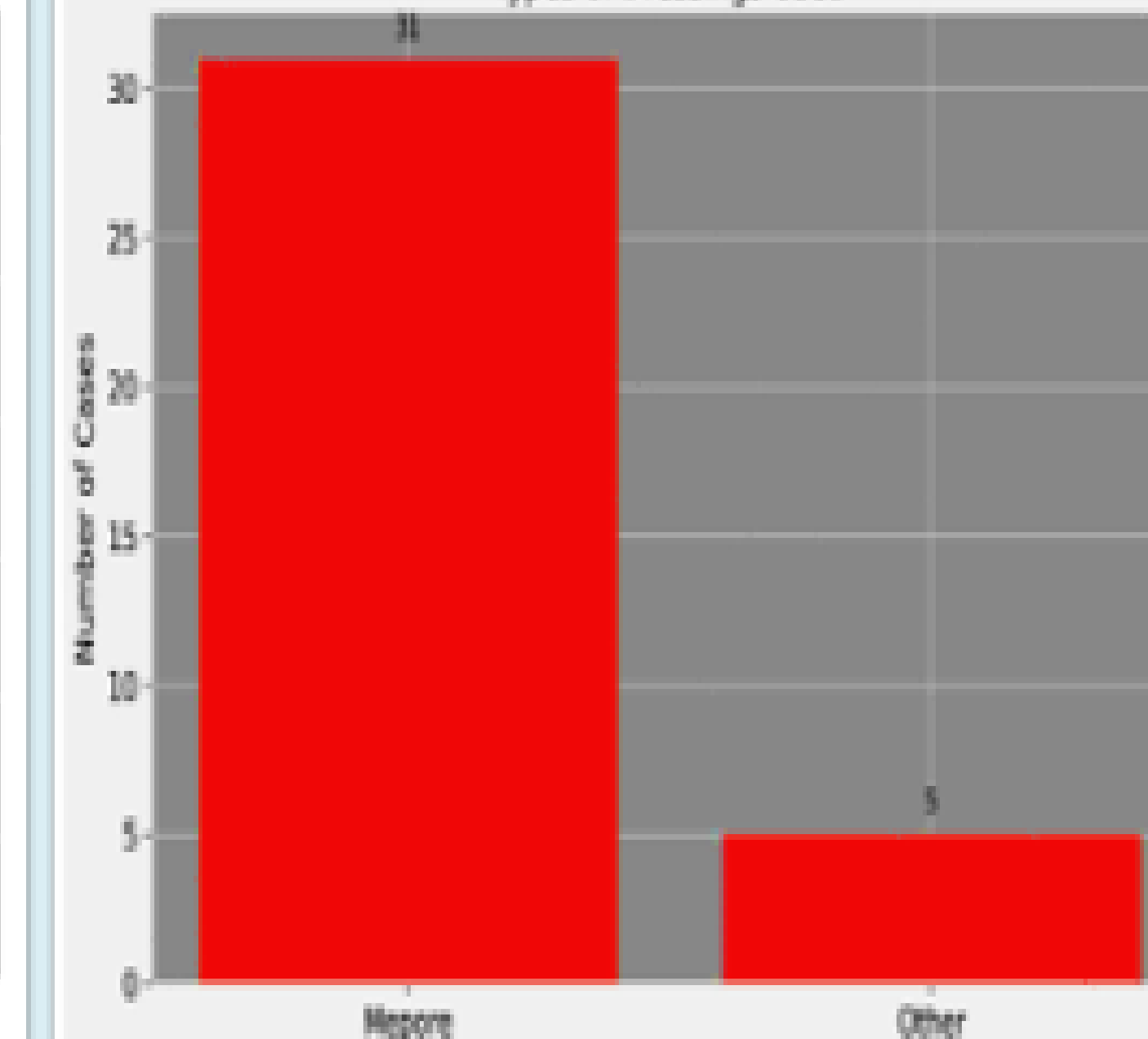
Longest duration surgery: 11h 2m (Oncology)

Shortest duration surgery:1hr non-malignant case

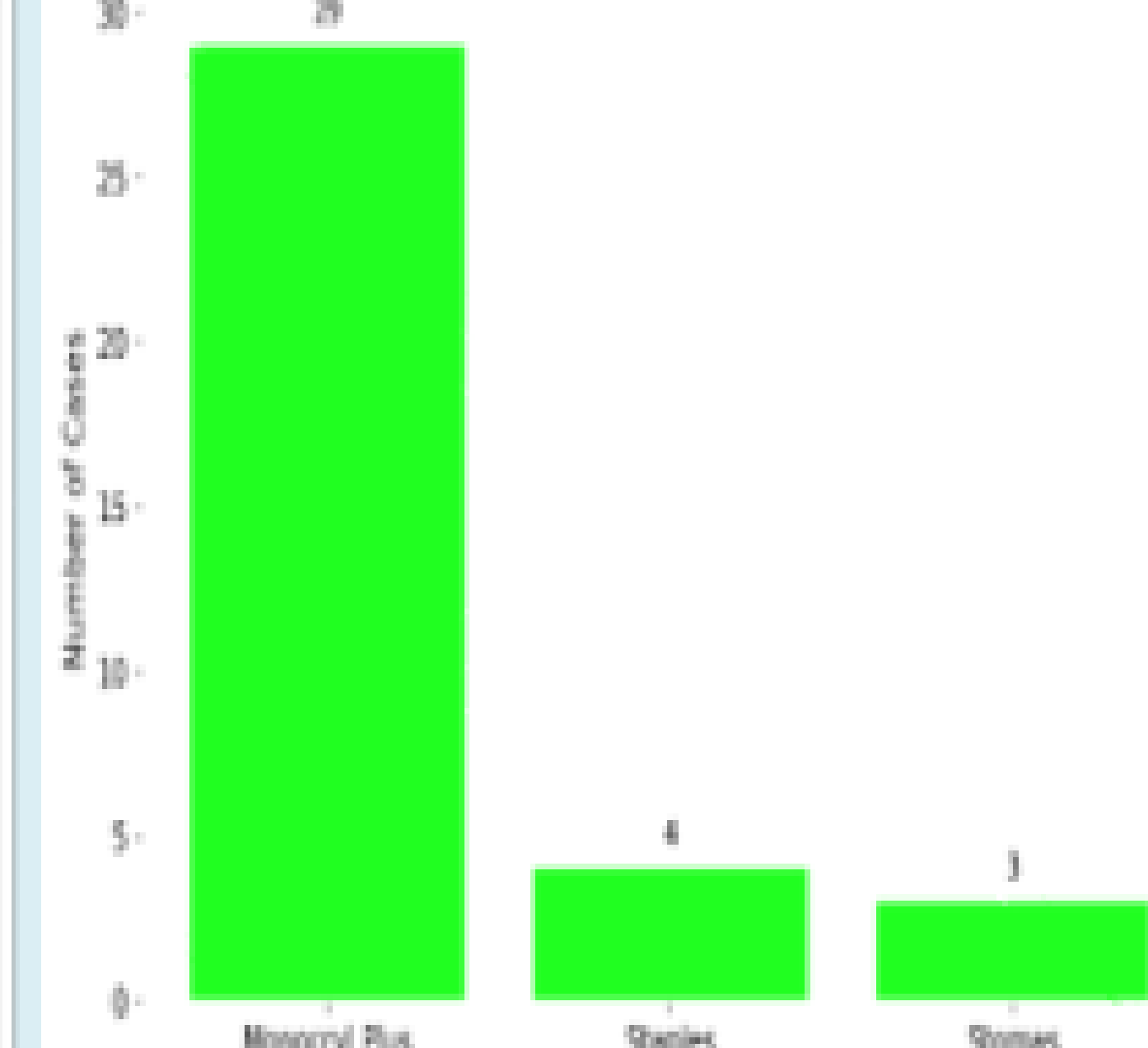
Patient Comorbidities



Types of Dressings Used



Skin Closure Methods Used



Conclusion

- Structured operative documentation and pre-op albumin levels & LFTs, surgical preparation, change of gloves/assistants/untoward events dressing type, number of rectus sheath catheters where required is crucial for completeness of record-keeping/Digital record-keeping
- Use of Chlorhexidine aqueous solution reduced early wound infections till day 7
- Tissue Viability Nurse involvement recommended in complex long cases
- Interactive dressings promote healing in complex surgeries