



Periprocedural DNR Management Following Policy Revision

A Retrospective Analysis of Patient Outcomes and Procedural Trends

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INTRODUCTION

In perioperative care, managing Do-Not-Resuscitate (DNR) orders and conducting code status discussions (CSDs) are crucial for respecting patient autonomy and ensuring proper medical care. Many patients scheduled for surgeries or procedures arrive with preexisting DNR orders, which need to be addressed preoperatively. DNR orders signify a preference against certain medical interventions, not a desire for death, presenting complex ethical challenges.

Despite their importance, perioperative CSDs are often inadequately documented, revealing a critical gap in practice. Enhancing CSDs involves optimizing workflows, clarifying choices, and improving documentation through electronic health records and supplementary consent forms. Anesthesiologists and surgeons play pivotal roles in balancing patient autonomy with medical best practices during perioperative care.

At our institution, a 2021 policy revision mandated CSDs for patients with DNR orders presenting for non-OR procedures, and anesthesiologists were designated the responsibility of conducting and documenting these discussions. This study will analyze post-policy trends in the management of periprocedural DNR status, assessing patient characteristics and impacts on outcomes.

METHODS

This retrospective cohort study examined adult cancer patients who underwent non-OR procedures with anesthesia from January 2022 to January 2024. It included both inpatients and outpatients with documented DNR status, excluding those under 18 or without a DNR order. Data were sourced from Epic and Health Information System, covering demographics (age, sex, gender, race, cancer type, ASA status) and outcomes (CSD results, anesthetic types: general anesthesia (GEN) and monitored anesthesia care (MAC), and days to death). The analysis aimed to descriptively assess the frequency of suspended vs. maintained DNR orders and their relationship with demographic and clinical factors.

RESULTS



Figure 1. The sex demographics of our population is 44% male and 56% female. 5% of the 56% female population maintained DNR status and 5% of the 44% male population maintained DNR status.

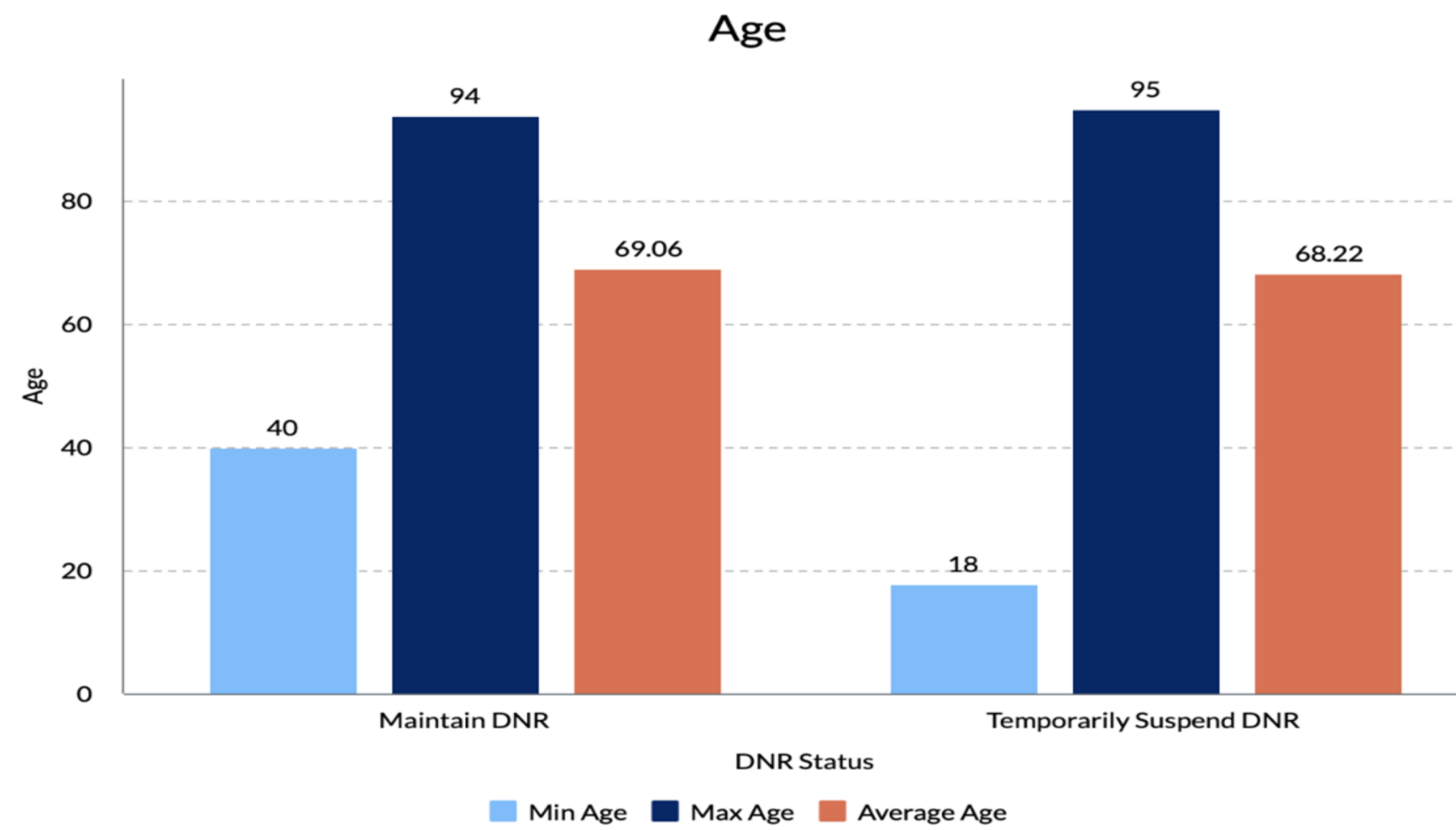


Figure 2. The age of patients ranged from 18 to 95 years old. The average age of patients who maintained DNR status was 69 while the average age for those who temporarily suspended their DNR status was 68.

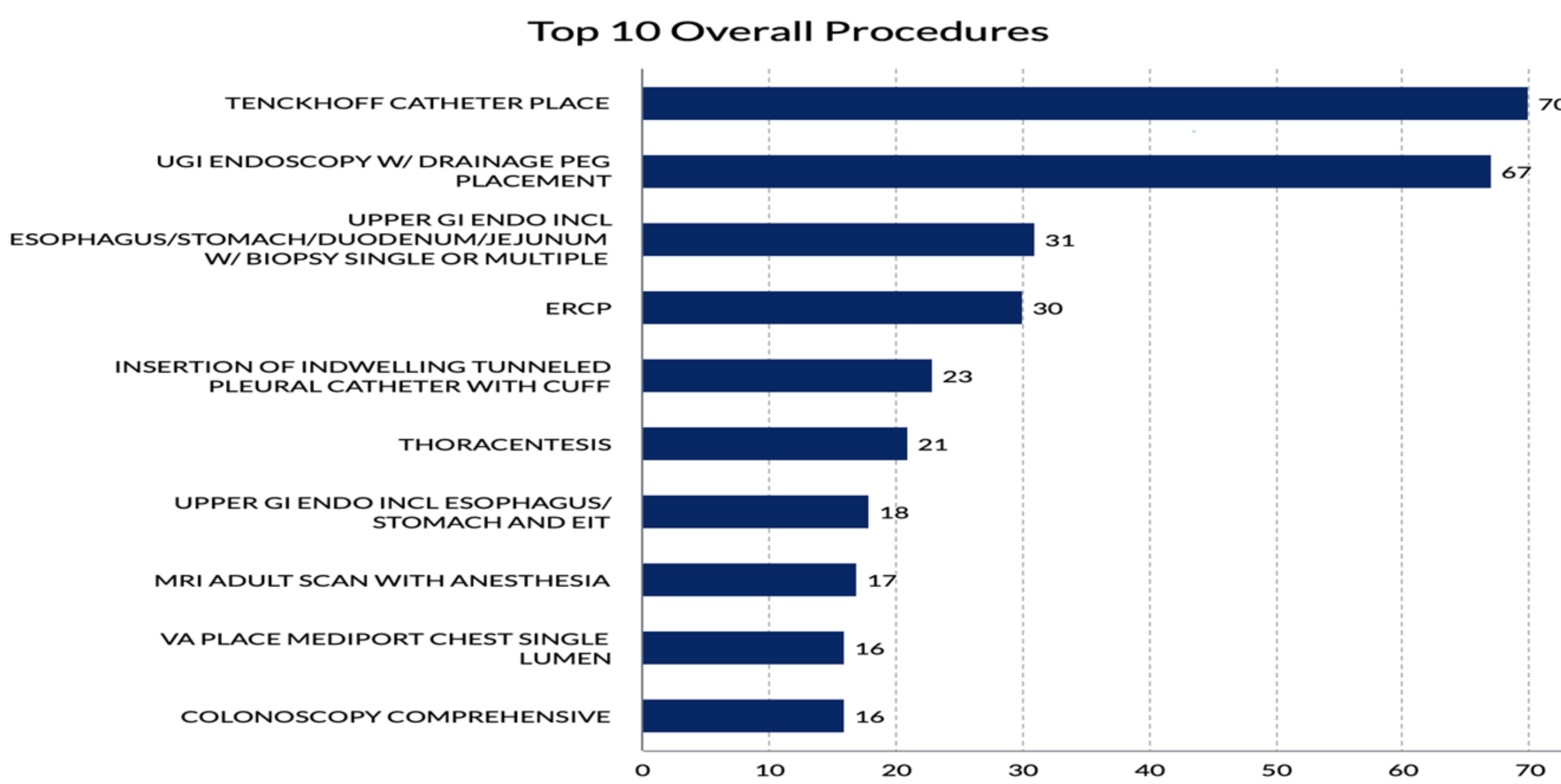


Figure 4. The most performed procedure was Tenckhoff Catheter Placement (70).

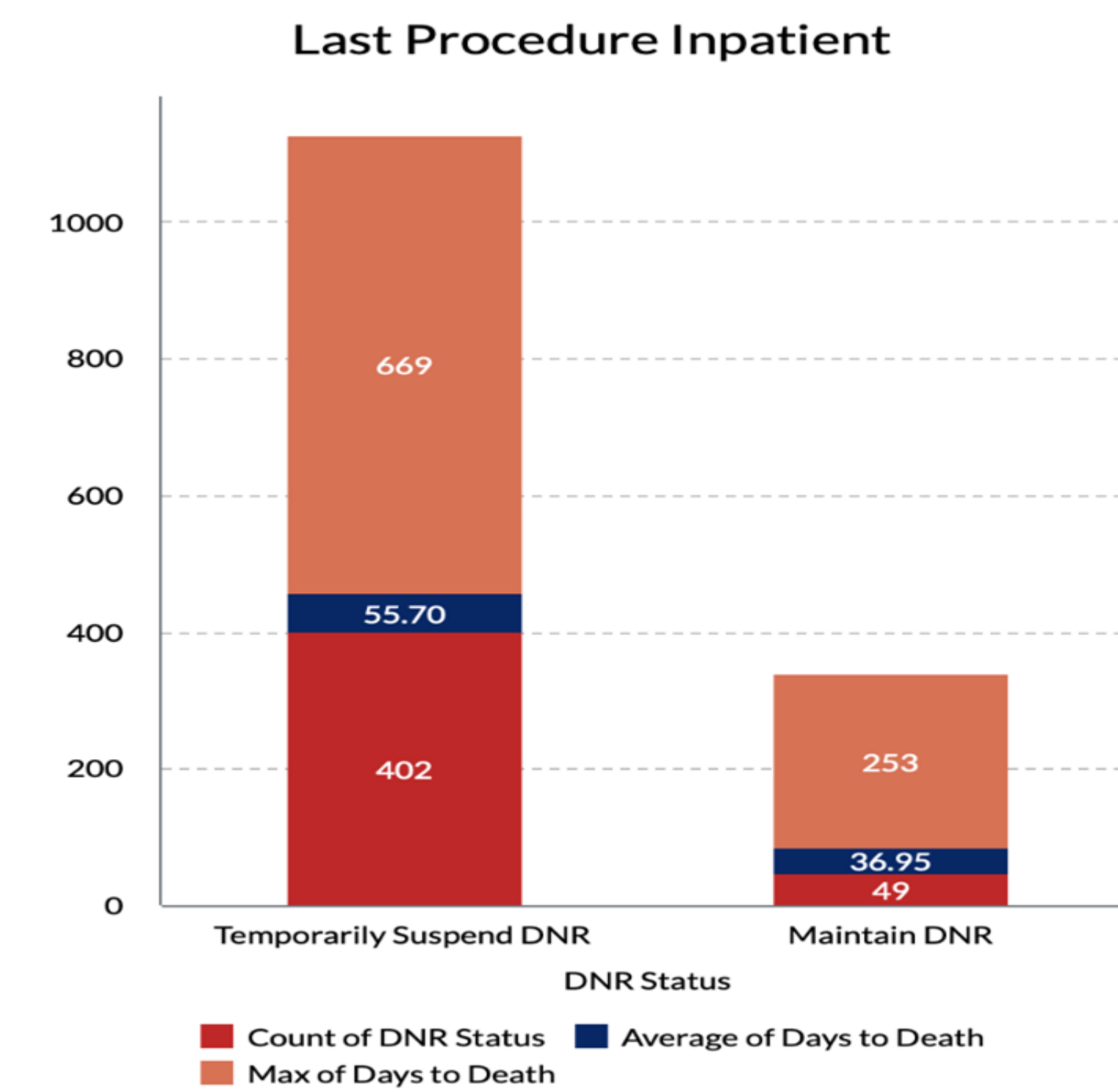


Figure 6. Based on the inpatients' last procedures, 402 procedures were performed with temporarily suspended DNR status. Amongst that population, the average days to death after procedure was 56 days (max: 669, min: 0), and for maintained DNR status the average days to death was 37 days (max: 253, min: 1).

Figure 7. Based on the inpatients' last procedures, 89% temporarily suspended their DNR status (57% received monitored anesthesia care and 43% received general anesthesia) and 11% maintained their DNR status (69% received monitored anesthesia care and 31% received general anesthesia).

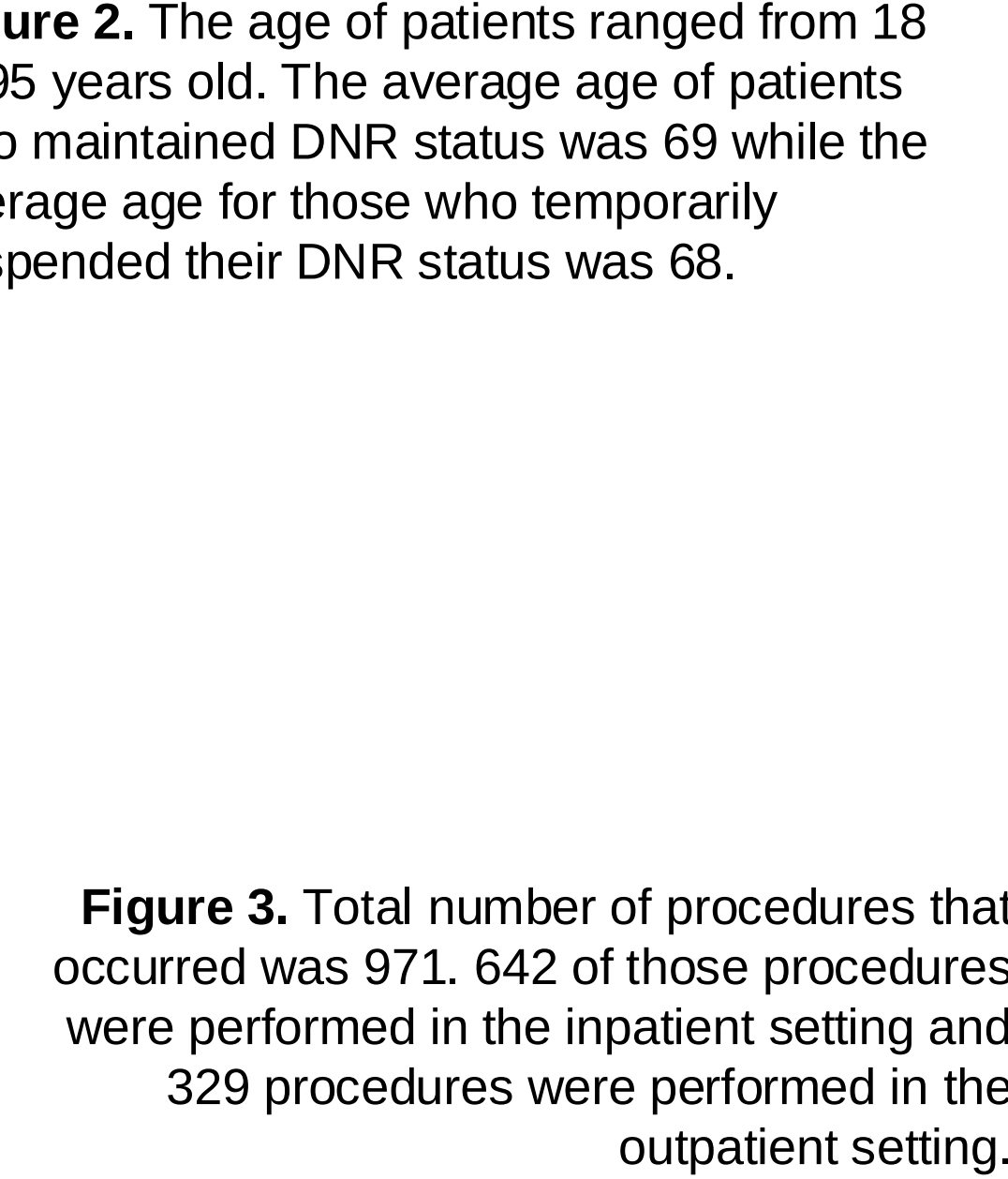


Figure 3. Total number of procedures that occurred was 971. 642 of those procedures were performed in the inpatient setting and 329 procedures were performed in the outpatient setting.

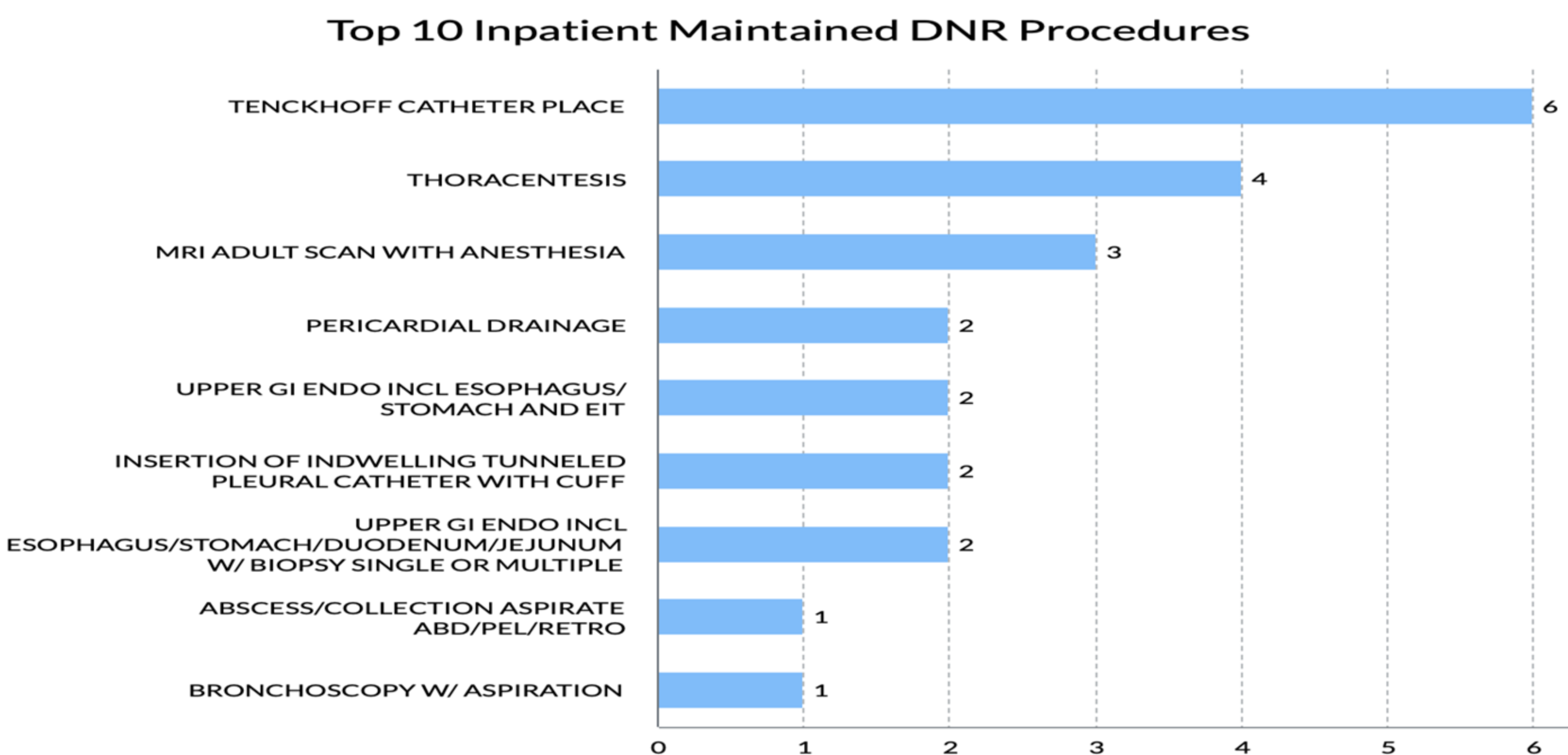


Figure 5. The most commonly performed procedures for inpatients who maintained DNR status were Tenckhoff catheter placement (6), followed by thoracentesis (4), and MRI adult scan with anesthesia (3).

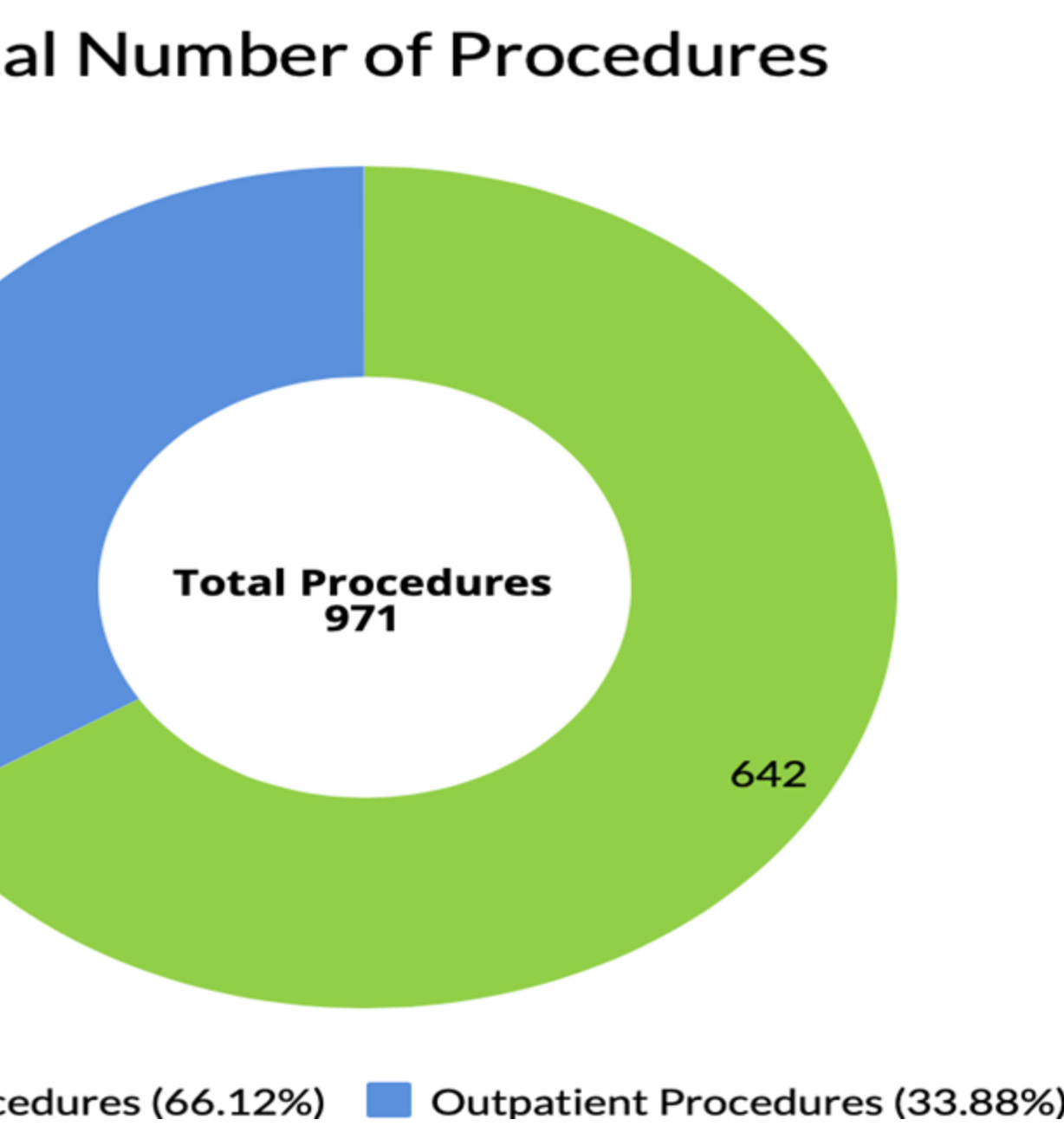
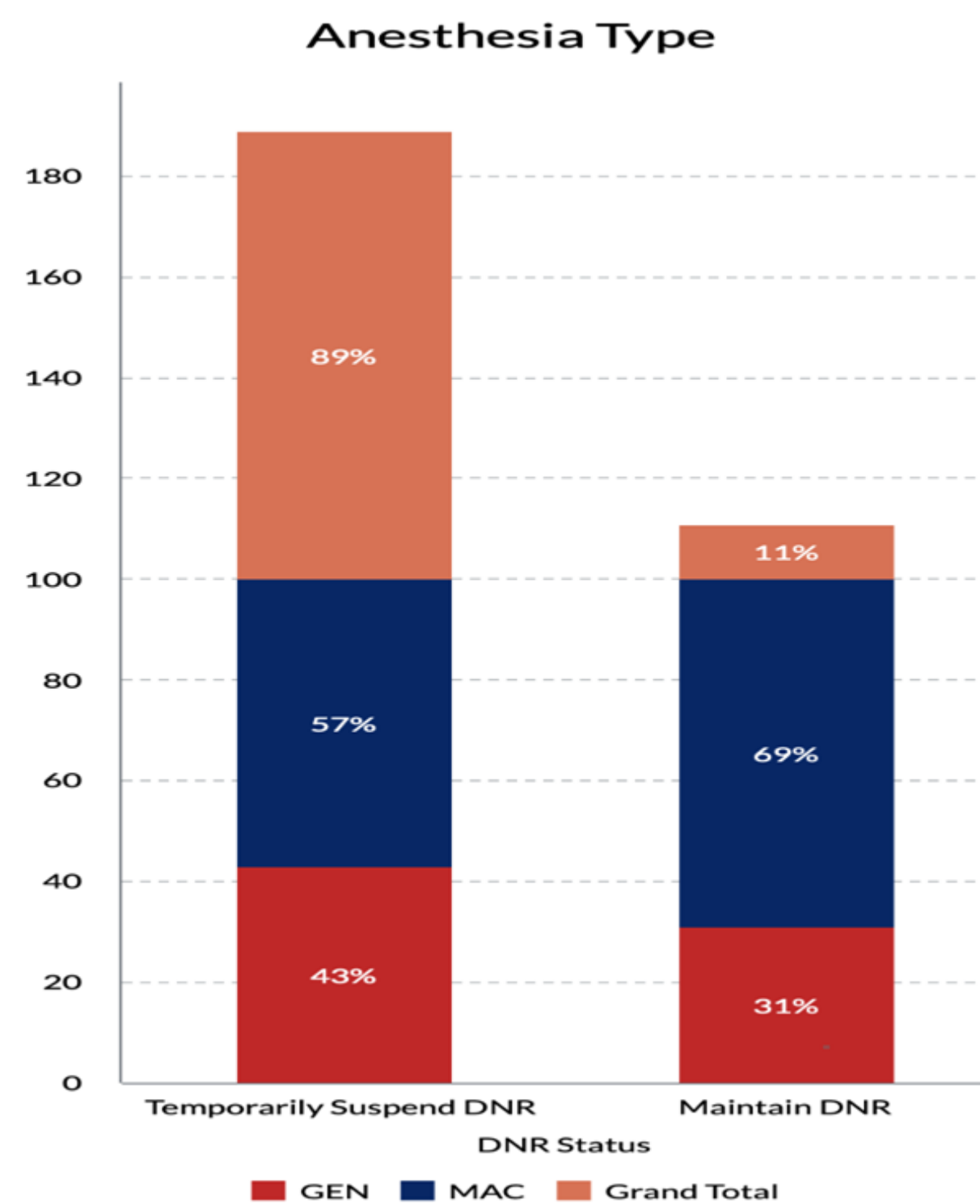


Figure 8.The average days since last supportive care consult for those who maintained DNR status was 4.7 days, vs. 71.32 days for those who temporarily suspended DNR status.

CONCLUSIONS

This study highlights the complexities of managing DNR orders in periprocedural care, especially among older cancer patients undergoing non-OR procedures with anesthesia. Our preliminary findings reveal a substantial tendency to temporarily suspend DNR orders, with 90% of procedures reflecting a preference for more aggressive care. However, patients who maintained their DNR status had a shorter average time to death, indicating closer alignment with patient preferences for end-of-life care. These results underscore the need for consistent and well-documented CSDs to ensure that perioperative care honors patient autonomy. Additionally, the frequent use of procedures like Tenckhoff catheter placement demonstrates the importance of symptom relief in patients, regardless of their DNR choices.

Future steps include incorporating statistical analysis to confirm the observed trends. Understanding these relationships will allow healthcare providers to better anticipate patient preferences and tailor CSDs to align with individual needs, further promoting patient autonomy and informed decision-making during periprocedural planning.

ACKNOWLEDGEMENTS

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