

Abstract

Background: Head and neck specimens are often difficult to orient after resection. This, at times paired with lack of familiarity, can make pathologic review challenging. We present a simple method for proper pathologic orientation that may also expedite review of pathologic margins.

Method: After the specimen is excised, a flat surface of the specimen is glued to a large plate. A marking pen is then used to circumferentially label parts of the specimen for proper orientation. Acetone is then used in the pathology lab to easily free the specimen from the plate for pathologic review.

Conclusion: We present a simple, effective method to orient often complex head and neck specimens with common materials that can universally be found in many operating rooms.

Introduction

- Due to the anatomic complexity of the region, head and neck specimens are often quite challenging to orient for pathology review.
- Accurate pathological review is necessary as negative resection margins are a significantly important prognostic factor in patients with head and neck malignancies.
- Frozen-section evaluation is critical and allows for further resection to negative margins before surgical closure
- We present a simple, easy method to orienting head and neck specimens, using many materials that can be easily found in operation rooms.

Method

- After the often amorphous specimen is removed, it is transferred to a large, flat, sturdy, disposable surface. We have been utilizing a styrofoam plate.
- A flat surface of the specimen is then attached to the plate with a type of cyanoacrylate glue. We use 2-octylcyanoacrylate topical skin adhesive, commonly referred to as Dermabond.
- Labels are then placed circumferentially per surgeon preference.
- With especially complicated specimens involving multiple parts of aerodigestive tract, different portions of the specimen may be inked with a marking pen for further clarification.
- The specimen is easily freed by application of acetone to the interface.



Figure 1: Resection of a squamous cell carcinoma of the soft palate.

Discussion

- With lack of proper anatomic orientation, there are often requests for resample of certain margins, leading to under and oversampling of margins, which could compromise the final pathology report.
- Negative resection margins are a significant prognostic factor for patients with head and neck malignancies. Inaccurate anatomic orientation can lead to false reports on the location of positive margins, which can negatively impact the patient's course of disease.
- We present a quick, effective, and easy-to-follow method of displaying head and neck specimens for pathological orientation.
- This method can be performed with materials that are commonly found in operating rooms across the United States.

References

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