

CORRELATION BETWEEN MENINGIOMA HISTOLOGICAL SUBTYPES AND ANATOMICAL LOCATION IN OPERATED PATIENTS FROM TERTIARY CENTRES IN JOHANNESBURG.

ABSTRACT

BACKGROUND

Meningiomas are reported to be the most common intracranial neoplasm in Neurosurgical practice. Two important factors that determine progression-free survival are the Histological sub-types (grade) and anatomical location. Anatomical location affects resectability and therefore recurrence. The study aims to find a relationship between these two factors and draw recommendations that would help manage this common neoplasm.

METHODS

This was a 3 year retrospective study of 125 histologically confirmed Meningiomas seen at tertiary hospitals in Johannesburg. We recorded all the histologically confirmed Meningiomas from the NHLS and mapped them against their anatomical location using the PACS system. We then used the Chi squared to analyses the main categorical variables to find their relationship.

RESULTS

Our model predicted 73% of the grades correctly, therefore suggesting that there is a relationship between histological subtypes and location, when location is grouped.

CONCLUSION

Granular location did not prove as predictive. Given the size of the data, we cannot conclude definitively that location alone can predict histological sub-type. What we can say is that in this study, location has shown a more significant relationship to histological sub-type than age and gender.