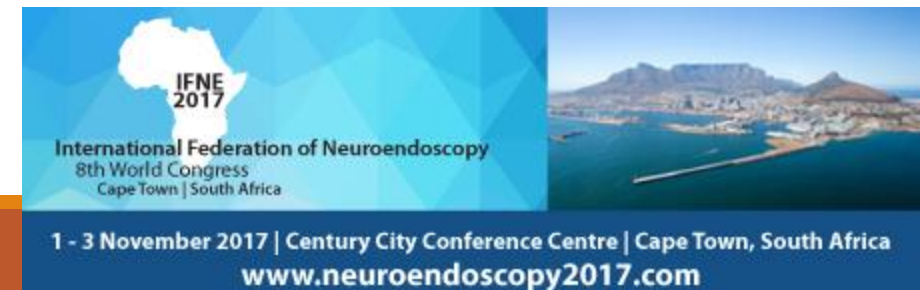


# TRANSNASOSEPTOSPHENOIDAL SURGERIES IN KORLE BU TEACHING HOSPITAL, GHANA: A 12-YEAR EXPERIENCE WITH MICROSCOPIC AND ENDOSCOPIC APPROACHES

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KBTH, ACCRA. GHANA  
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# AUTHORS

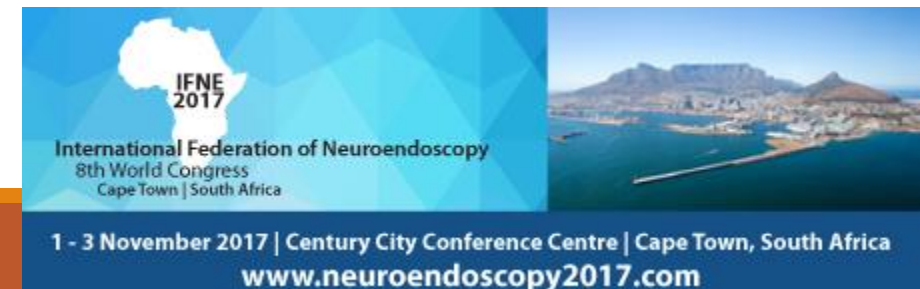
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**NO CONFLICT OF INTEREST DECLARED**

# BACKGROUND

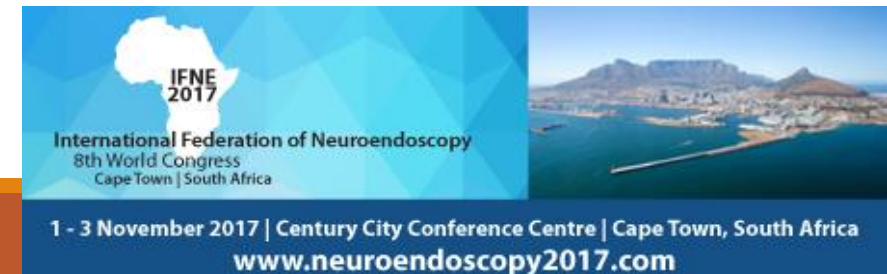
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Transsphenoidal approach is the commonest and safest route for the resection of pituitary adenoma worldwide.

Microscopic, endoscopic and endoscopic-assisted approaches are in wide use.

The microscopic approach has been widely employed in the excision of pituitary tumours in the Korle-Bu Teaching Hospital; a tertiary referral hospital in Ghana.

Of recent, experience is also being developed in the endoscopic approach.



# OBJECTIVE

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To present the outcomes of the patients we have managed using both approaches over a 12-year period.



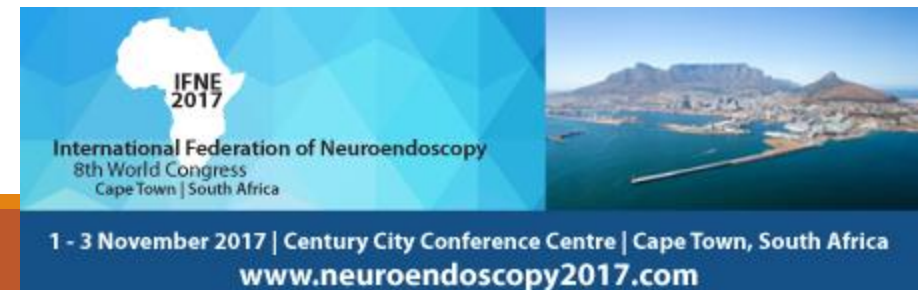
# METHOD

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This is a retrospective descriptive study using the clinical records of neurosurgical patients in Korle Bu Teaching Hospital, Accra, Ghana.

The study period covers transnasal transsphenoidal surgeries, both microscopic and endoscopic, performed between February 2005 and February 2017.

Only patients with complete data were included in the analysis.



# RESULT

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	Total	Male	Female	Age range (yr)	Median age (yr)
Total TSS	143	74 (52%)	69 (48%)		
Complete data	74	33 (45%)	41 (55%)	41 - 60	48

# Clinical presentation

Symptom	Frequency	Percentage(%)
Visual impairment/field defect	63	90
Headache	60	85
Galactorrhoea	19	28
Amenorrhoea	17	25
Weight gain	15	22
Decreased libido	8	12
Acromegaly	5	7
CSF rhinorrhoea	3	4
Lassitude	3	4
Apoplexy	2	3
Seizure	2	3



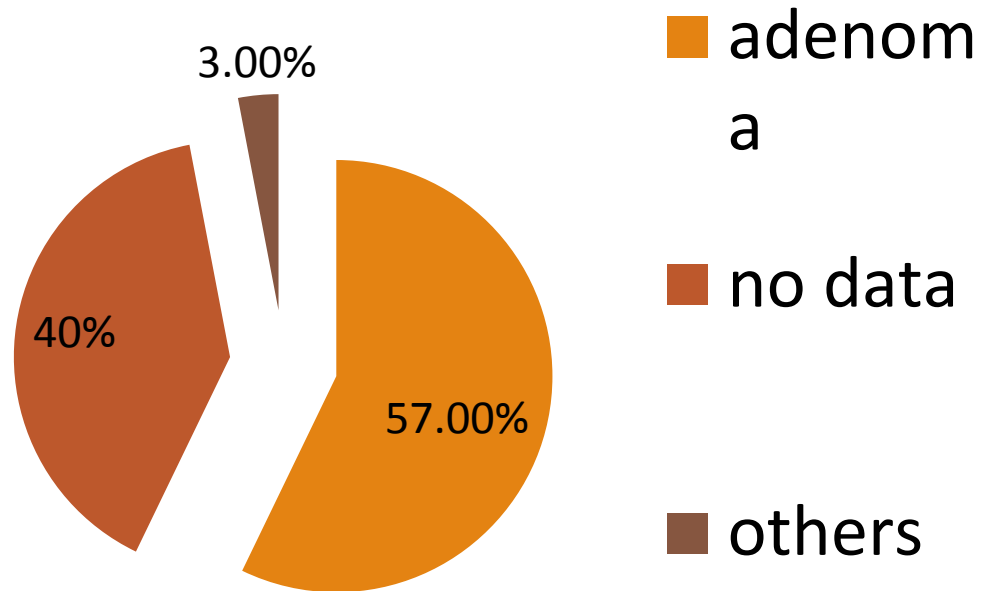


# Surgical approaches

	OVERALL	COMPLETE DATA (%)
Microscopic approach	134	65 (48%)
Endoscopic approach	9	9 (100%)
Total	143	74(51.7%)



# Pathology



**97% of the adenoma were macroadenoma.  
Majority of the macroadenomas were non-functional**



# Outcome

Outcome measure	No change	Improvement	Deterioration	No data
Vision	16 (21.6%)	32 (43.2%)	3 (4.1%)	23 (31%)
Endocrine	28 (37.8)	10 (13.5%)	0	36 (48.6%)

Outcome measure	Frequency(out of 74)	Percentage (%)
Mortality	3	4.1%
Recurrence	2	1.5%

**Cause of death: PE in one patient, Meningitis in 2 patients**

Overall recurrence out of 137 transsphenoidals – **8(5.8%)**



# COMPLICATIONS

Complication	Frequency(out of 74)	Percentage(%)
Diabetes insipidus	24	32
CSF rhinorrhoea	9	12
Meningitis	3	4.1
Visual deterioration	3	4.1
Septal haematoma	1	1.3



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# DISCUSSION

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The outcome of transsphenoidal surgeries in this series showed visual improvement in 43.2% while hormonal levels improved in 13.5%.

Visual deterioration was observed in 4% of the participants in this review. Other large reviews have reported visual deterioration in 1-2%.

Operative mortality of between 0 and 20% have been reported. Our perioperative mortality was 4.1%.

Major complications were Diabetes Insipidus (32%), CSF rhinorrhea (12%), Meningitis (4.1%).



# CONCLUSION

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Both endoscopic and microscopic transnasoseptosphenoïdal resection of pituitary tumour can be done safely with minimal morbidity and mortality even in low resource settings.

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THANK YOU