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## ***Dedication***

*To my mother , with love for her continued love and support during all the way to my family for their effort ,patience, support & understanding through the period of my research*

*To my brother idress for his continuous encouragement and support through all my years of study*

## *Acknowledgment*

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My great thank extend to my family for encouragement & support

## ABBREVIATIONS

	Anterior cingulate circuit	Acc
	Alzheimer Disease	AD
	C N	caudate nucleus
DLPFC	Dorsolateral prefrontal Circuit	
	FSE	fast spin Echo
.Flair	fluid attenuated inversion recovery	
FTLD	frontotemporal lobar degeneration	
	FTD	frontotemporal Dementia
MRI	Magnetic resonance imaging	
MMSE	mini – mental state Examination	
	MM	Millimeter
	ICV	intracranial Volume
		Lt Left
	OFC	Orbit Frontal Circuit
OCD	obsessive compulsive disorder	
	Pt	patient
	S <sub>1</sub>	slice one
	S <sub>2</sub>	slice two
	S <sub>3</sub>	slice three
	SD	Semantic Dementia
	Rt	Right

# ***ABSTRACT***

The study aimed to measurement the Caudate nucleus volume using MRI as gold standard because of its high efficiency in measurement of caudate nucleus .disorder

This study was conducted at modern medical center where there was enough cases and availability of require MRI machine and material to perform proper , measurement

Sixty patients ,30 male and 30 female of suspected Caudate nucleus pathology of . different ages and genders under went MRI for brain

The result equation of MRI was noted that in both male and female the length of right Caudate nucleus is larger than that of the left Caudate nucleus the width in both male and female the right width of Caudate nucleus is larger than that of the left Caudate nucleus and is no different between male and female .volume

.The volume of the both male and female is decrease when the age is increase  
The result confirmed that continuous study used that patients index soft .measurement and pathology of Caudate nucleus

## ملخص الدراسة

استهدفت الدراسة قياس حجم النواة الزبيلية بالرنين المغناطيسي نسبة لكفاءة ودقة في قياس النواة الزبيلية.

اجريت هذه الدراسة في المركز الطبي الحديث حيث تتوفر الحالات المرضية الكافية هذه الدراسة بالاضافة الى الاجهزة اللازمة والمواد المطلوبة لاجراء الفحوصات.

اخزت العينة من 60 مريض من اناث وزكور في اعمار مختلفة يعانون من امراض في المخ ,وتوصلت الدراسة الي ان طول النواة الزبيلية في الرجال والنساء بالجهة اليمنى اطول من الشمال .

وطول عرض النواة للرجال والنساء في اليمين اكبر من الشمال كما انه لا يوجد فرق في حجم النواة الزبيلية في الرجال والنساء .

كذلك توصلت الدراسة الي انه كلما تقدم الشخص في العمر كلما قل حجم النواة الزبيلية.

و من هذه النتائج نوصى بمزيد من الدراسة باستخدام طول ووزن المريض وكذلك امراض النواة الزبيلية وباستخدام اجهزة متقدمة .

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