RESULTS

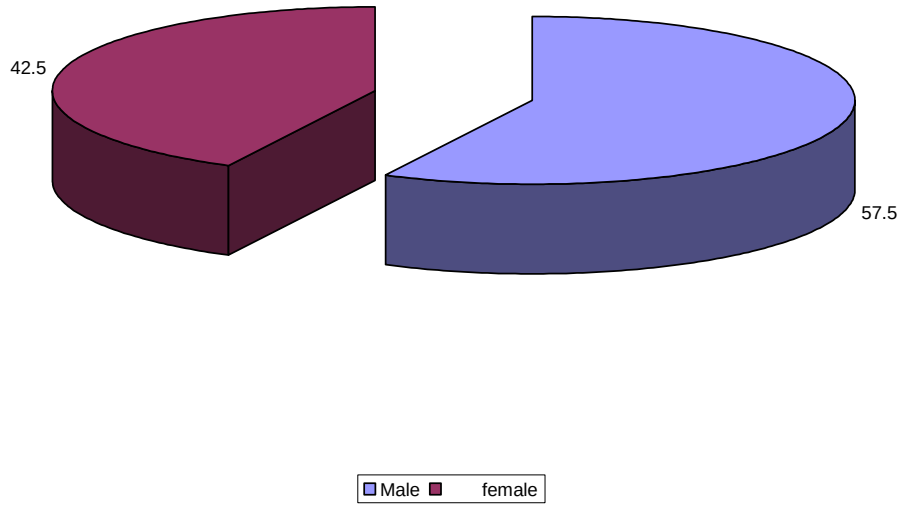
The results of this study will be discussed in tables (1-15) and figures (1-15).

Table (1): Epidemiological data of the patients.

Age (months)	**Minimum**	**Maximum**	**Mean± SD**
	1	120	31.90±29.626
Sex	**No.**	**Percent**	
Male	23	57.5	
female	17	42.5	
Consanguinity	**Frequency**	**Percent**	
Yes	23	57.5	
No	17	42.5	
Duration of admission in hospital (days)	**Minimum**	**Maximum**	**Mean± SD**
	1	18	8.00±4.194

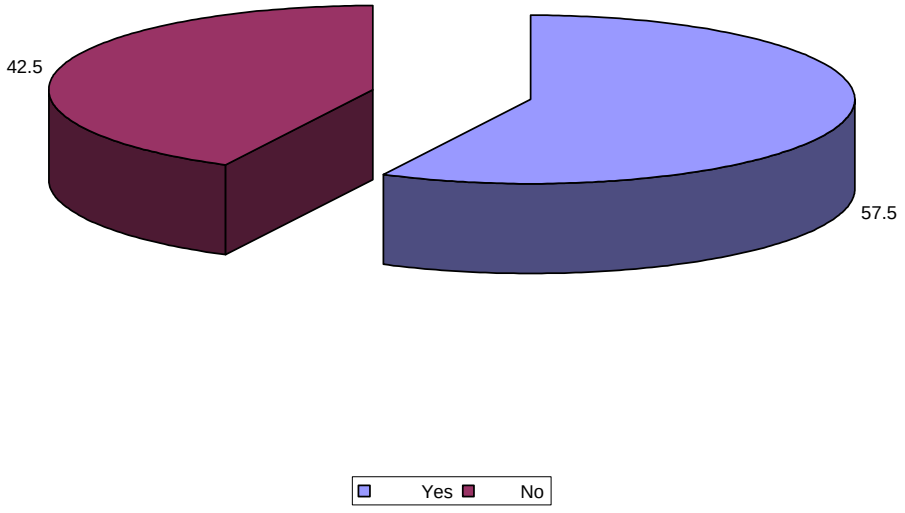
Table (1) shows epidemiological data of the patients. There were 42.5%for female and 57.5% for male .There were 42.5% negative consanguinity and 57.5% positive consanguinity.

Figure(1) sex distribution



Figure(1) show sex distribution there were 57.5 % Male 42.5% female

Figure(2) consanguinty of the study group



Figure(2) show consanguinty of the study group there were 57.5 % +ve consanguinty 42.5% -ve consanguinty

Table (2): Clinical and laboratory data of the patients.

Clinical data	**Minimum**	**Maximum**	**Mean± SD**
Weight (Kg)	3	45	12.00±8.398
Height(Cm)	50	140	85.90±23.609
Head circumference(Cm)	33	56	45.25±6.238
Motor system examination			
Tone	**Frequency**	**Percent**	
Hypertonia	9	22.5	
Hypotonia	13	32.5	
Normotonia	18	45	
Power			
Decrease activity	3	٧.5	
Paralysis	14	35	
Normal	23	57.5	
Reflex			
Hypereflexia	٩	22.5	
Hyporeflexia	١١	27.5	
Normoreflexia	٢٠	50	
Laboratory data	**Minimum**	**Maximum**	**Mean± SD**
Ca(mg/dl)	5.0	10.7	8.767±1.1772
Na(mEq/L)	120	159	137.20±7.215
K(mEq/L)	3.0	5.9	4.660±.6143
Blood glucose(mg/dl)	30	٣٢٠	99.27±42.691

Table (2) shows clinical data (weight, height, head circumference and motor system examination) and laboratory data (serum Ca, Mg,Na and k, blood glucose level).

Figure (3) means of wt, Ht and head circumferance

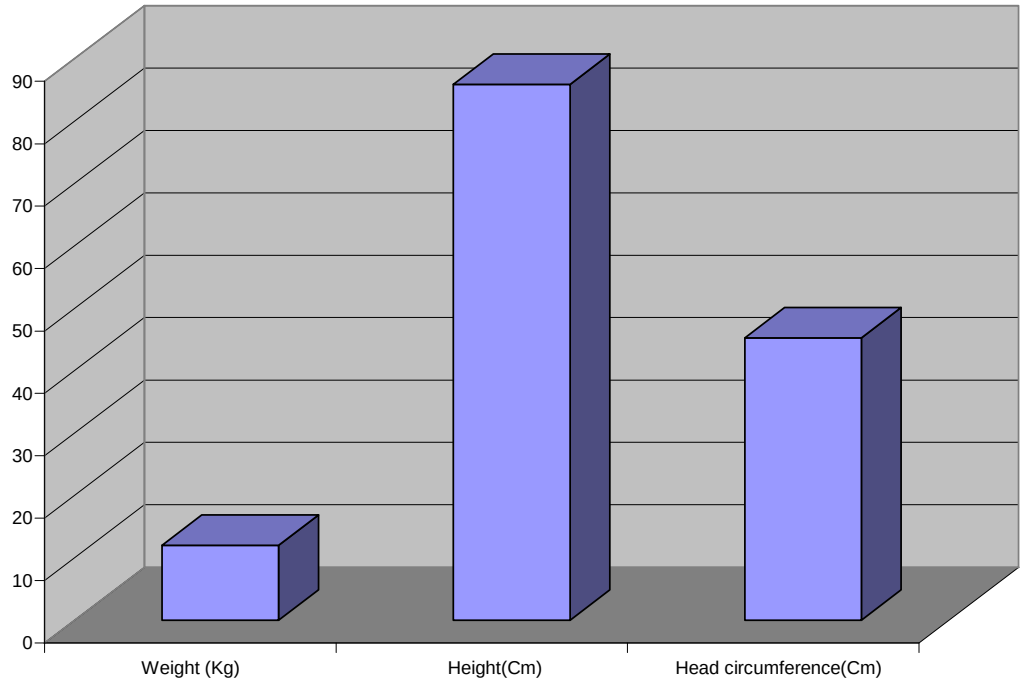
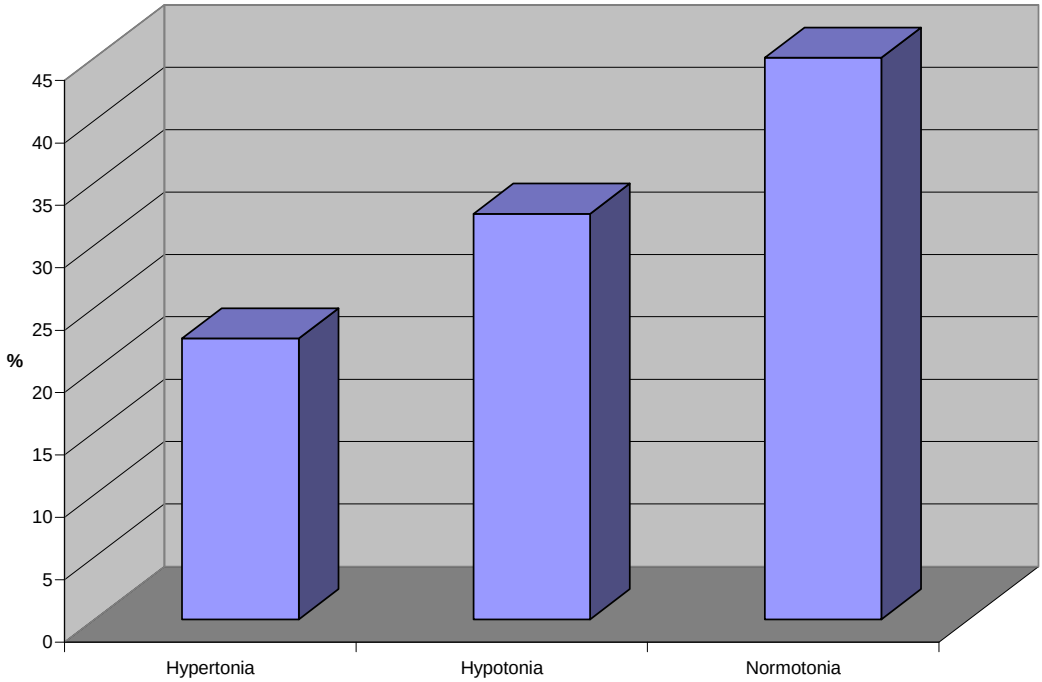


Figure (3) shows means of weight, height and head circumferance

Figure(4) Tone distribution



Figure(4) shows Tone distribution

Figure (5) Power distribution

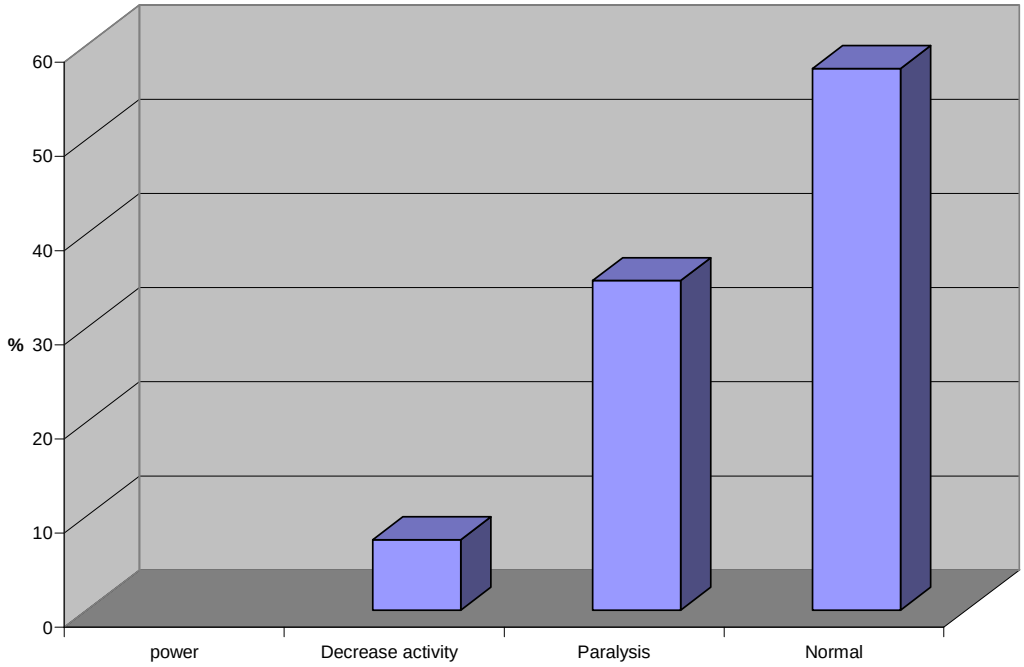
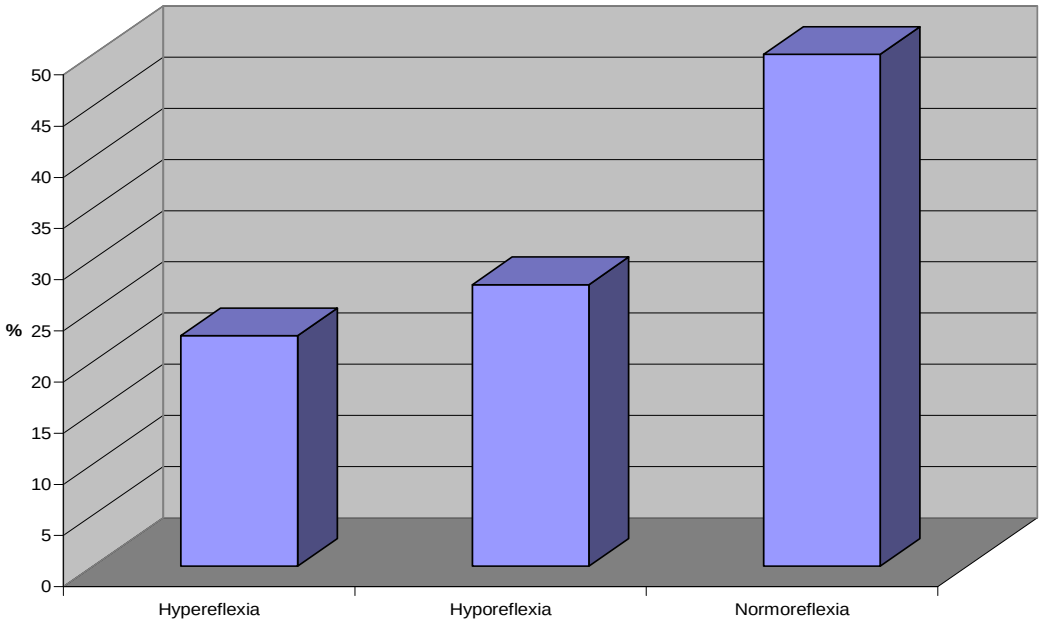


Figure (5) shows Power distribution

Figure(6) Reflex distribution



Figure(6) shows reflex distribution

Figure(7) Laboratory data

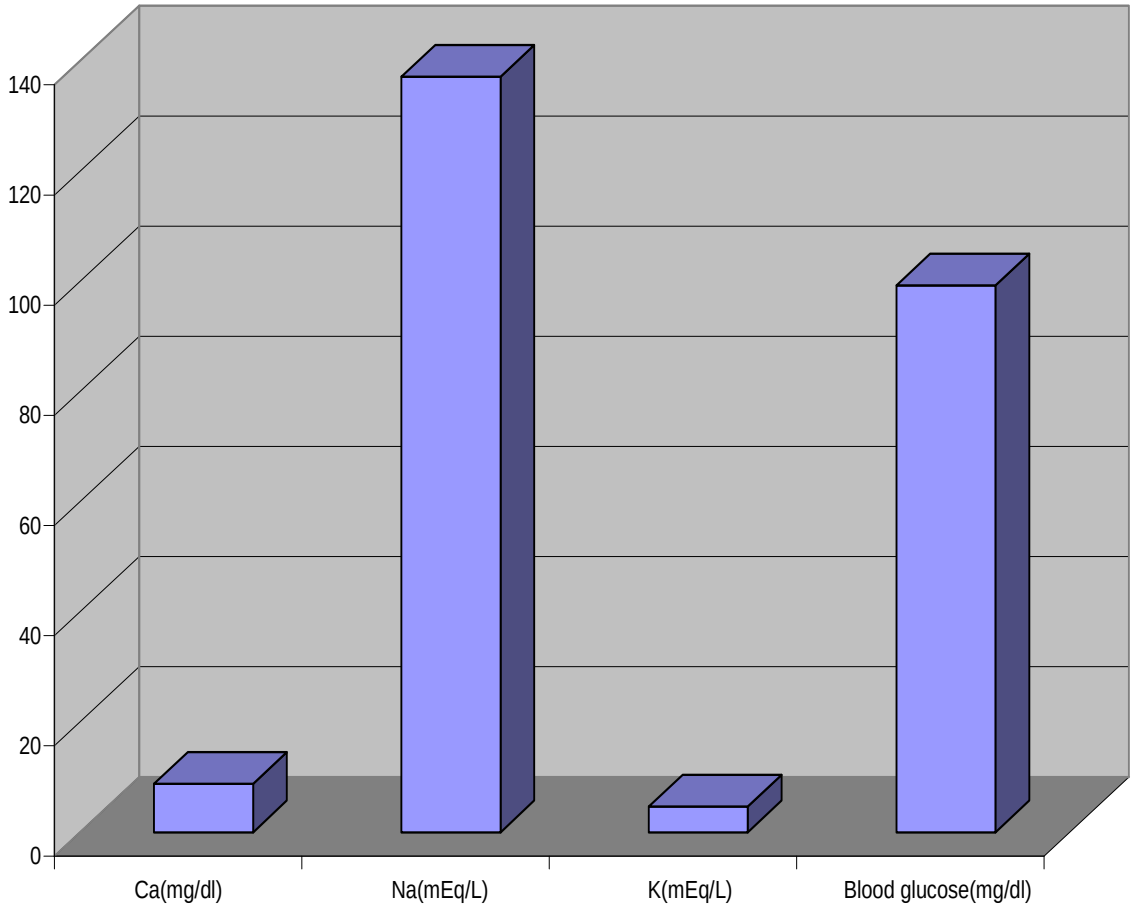


Figure (7) shows laboratory data

Table (3): Aetiological Classification of status epilepticus patients.

	Frequency	Percent
Acute symptomatic	14	35.0
Idiopathic, epilepsy-related	9	22.5
progressive encephalopathy	4	10.0
prolonged febrile convulsion	4	10.0
Remote symptomatic	5	12.5
Unclassified	4	10.0
Total	40	100.0

Table (3) shows that acute symptomatic CSE is the most common type of convulsive status epilepticus and represents 35% of cases.

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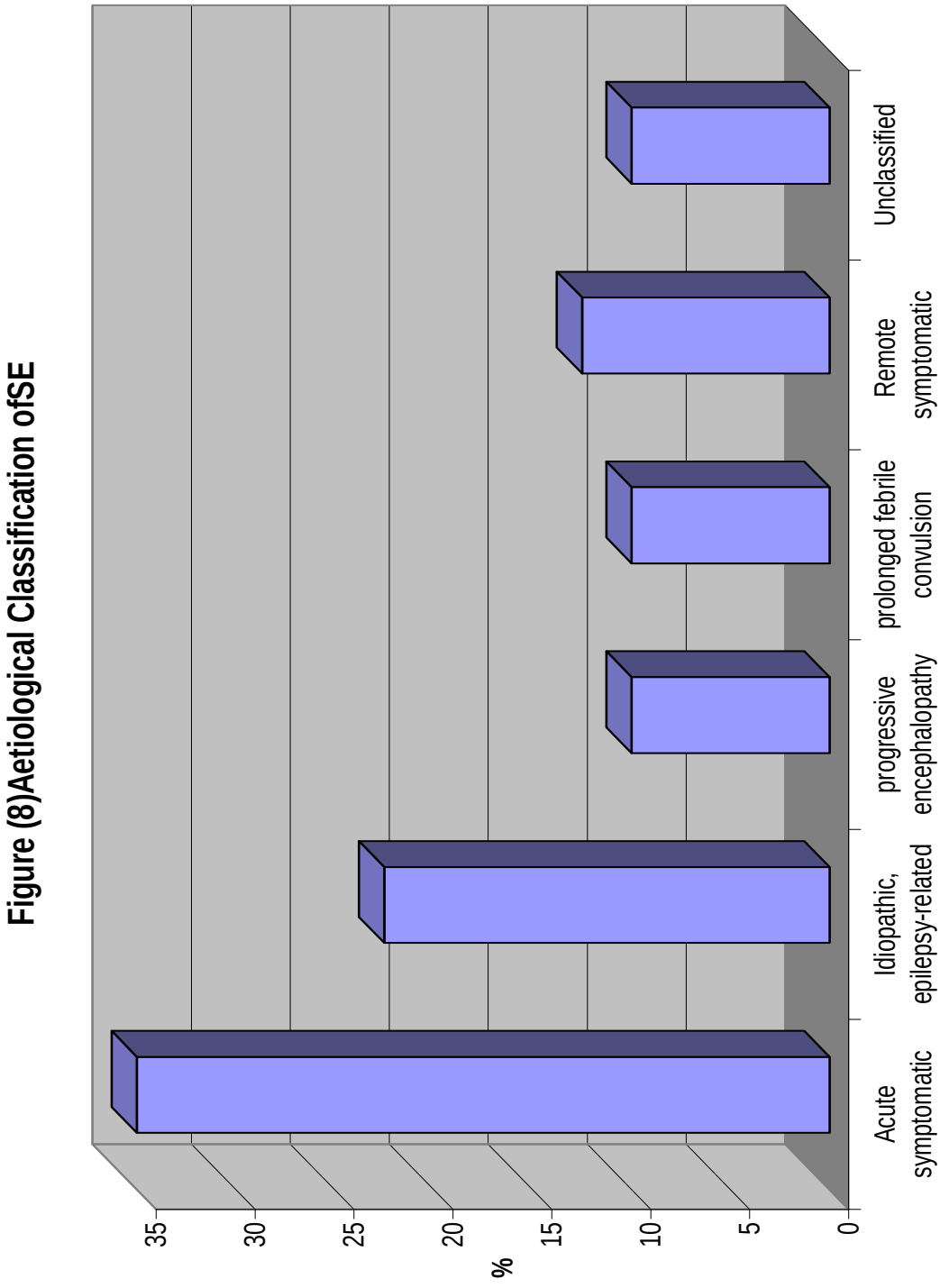


Figure (8) shows aetiological classification of SE

Table (4): Aetiology of status epilepticus in different age groups

Diagnosis	<2 years	3–5 years	6–10 years	Total
Viral encephalitis	٤	٣	١	٨
Epilepsy	2	٥	٢	9
Cerebral palsy	٤	١	٠	٥
Febrile convulsions	4	٠	٠	4
Hypocalcamia	٢	٠	١	٣
Lat onset hemorrhagic disease of newborn	٢	٠	٠	٢
Glutaric acidemia type 1	١	٠	٠	١
Choroid plexus cyst	١	٠	٠	١
Hyper natremic dehydration	١	٠	٠	١
Hypoglycemia	٠	١	٠	١
Tricyclic antidepressant toxicity	1	0	٠	١
Asphyxia	١	٠	٠	١
phenylketonuria	١	٠	٠	١
Brain degenerative diseases	١	٠	٠	١
Diabetic Ketoacidosis	٠	٠	١	١
Total	٢5	١0	٥	٤٠

Table (4) shows aetiology of status epilepticus in different age groups, epilepsy is the most common aetiology in 9 cases followed by viral encephalitis in 8 cases.

Table (5): Cranial US findings in 9 studied patients.

cranial US	Frequency	Percent
Brain atrophy	2	22.2
Diffuse inter ventricular heamorege	1	11.1
Dilated all ventricles	1	11.1
Right side inter ventricular hemorrhage	1	11.1
Normal	4	44.4

Table (5) shows Cranial US findings in 9 studied patients, brain atrophy is the most common and represent 22.2% of cases.

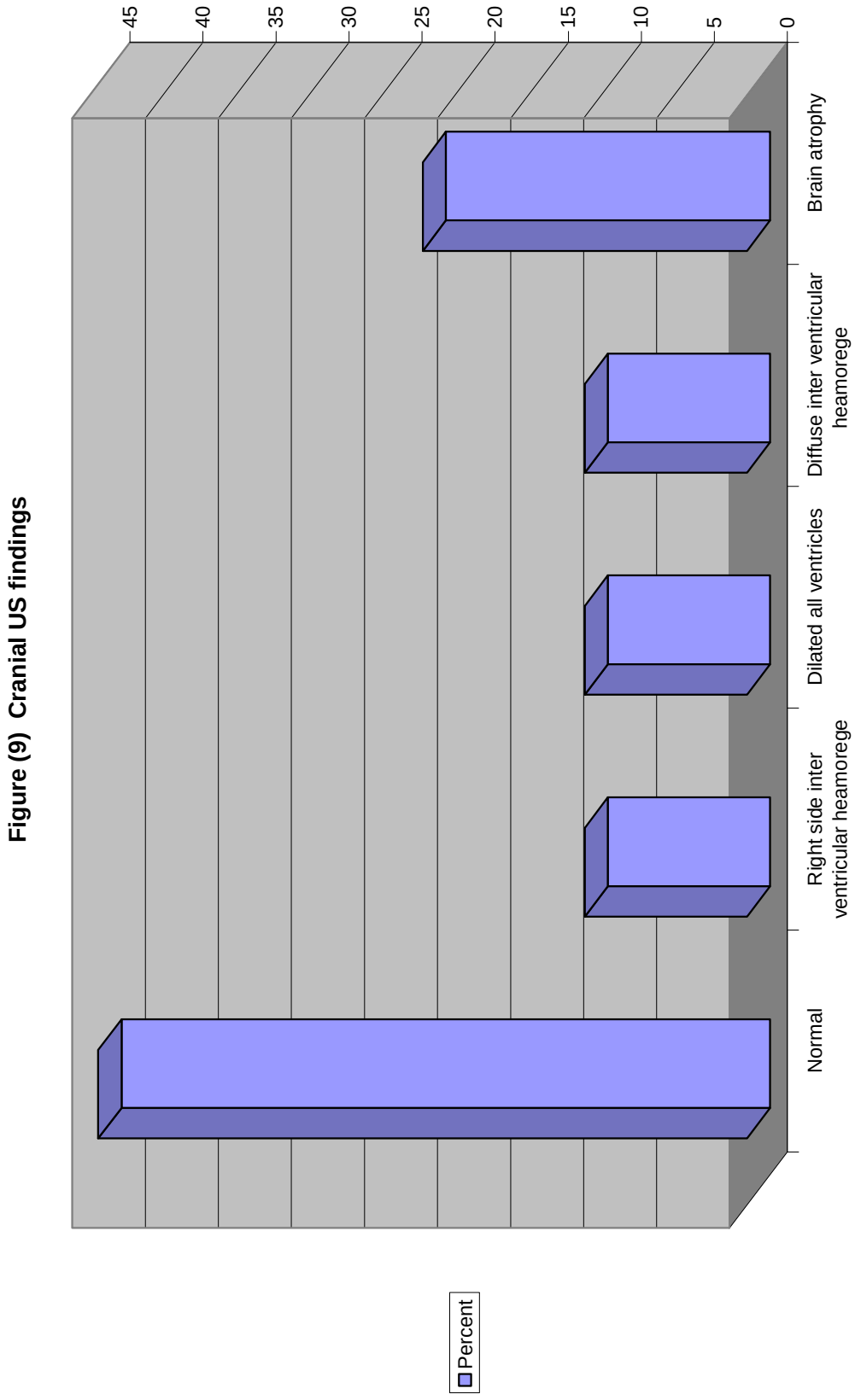


Figure (9) Cranial US findings

Figure (9) shows Cranial US findings

Table (6): CT findings in 12 studied patients.

CT findings	Frequency	Percent
Abnormal enhancement of inflammatory nature	1	8.3
Brain atrophy	2	16.6
Brain calcification	1	8.3
Decrease internal capscule denisity, suggesting demylnation brain disease.	1	8.3
Multiple hypodens areas in both cerebral hemispheres(encephalitis)	1	8.3
Normal	6	50

Table (6) shows CT findings in 12 studied patients, brain atrophy is the most common and represents 16.6% of cases.

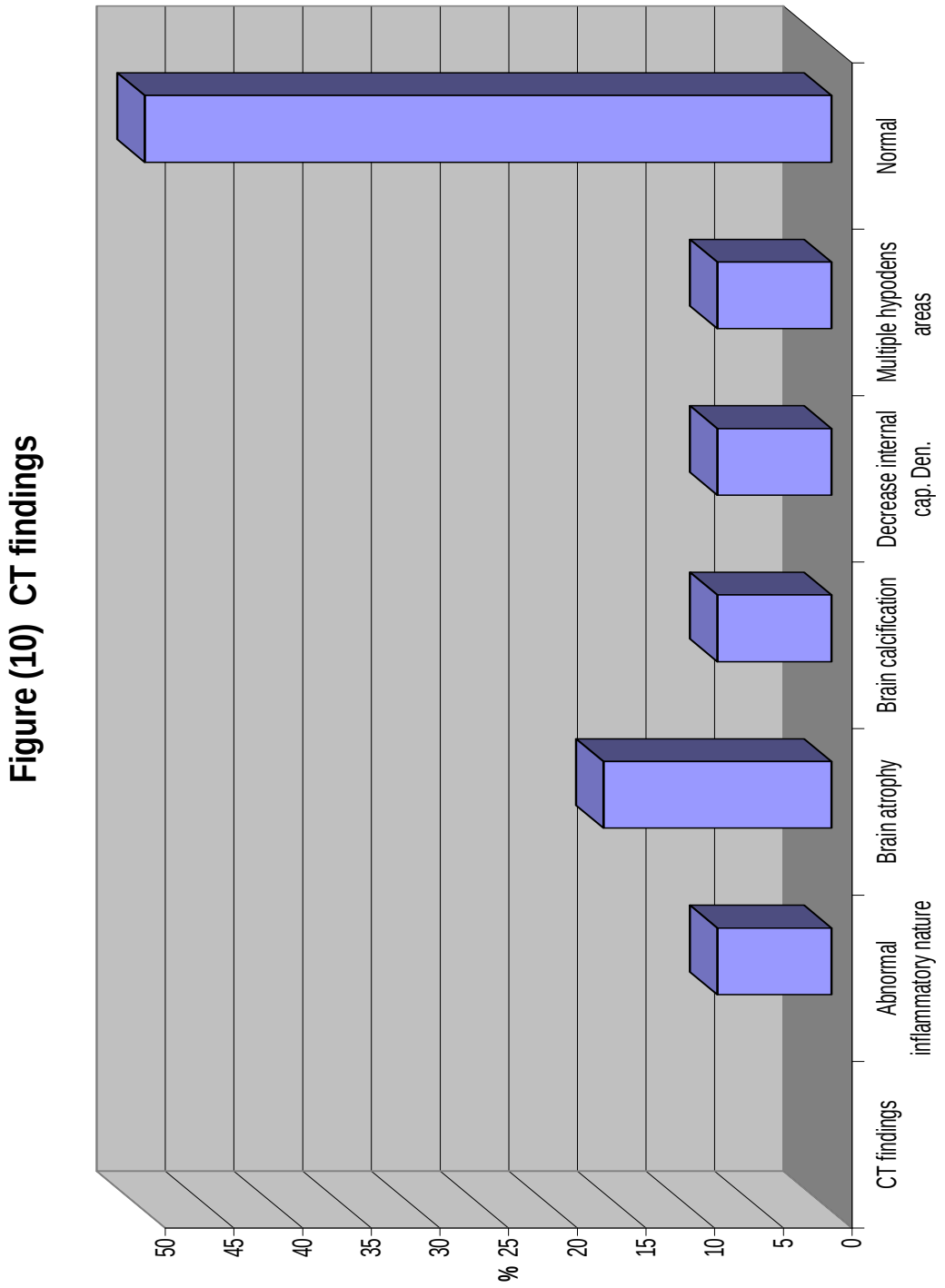


Figure (10) shows CT findings

Table (7): MRI findings in 19 studied patients.

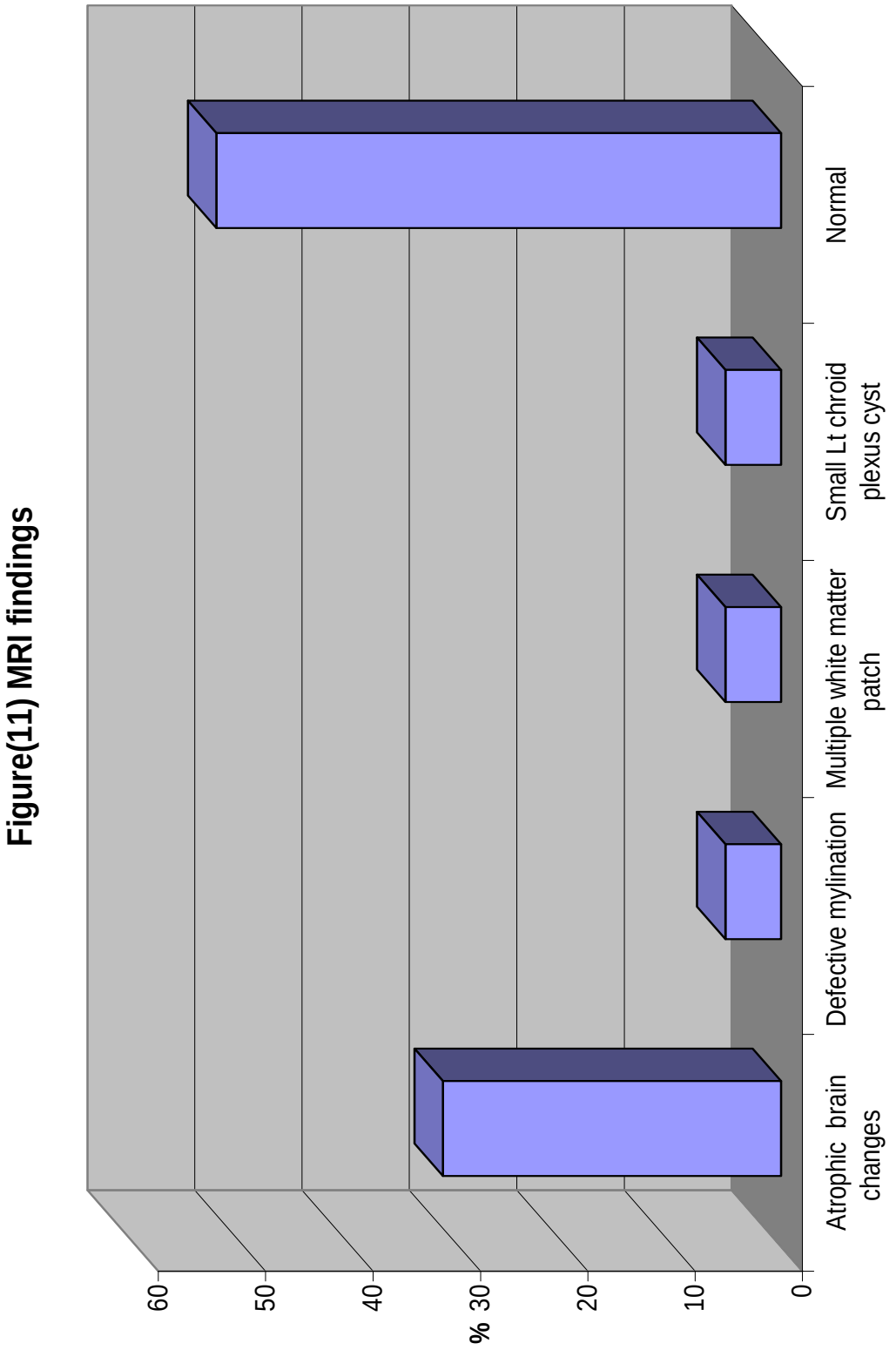
MRI findings	Frequency	Percent
Atrophic brain changes	6	31.5
Defective mylination in cerbellar vermises and basal ganglia	1	5.2
Multiple white matter patchs are liklely diffuse white matter disease? desmylination	1	5.2
Small Lt chroid plexus cyst	1	5.2
Normal	10	52.6

Table (7) shows MRI findings in 19 studied patients, atrophic brain changes is the most common and represents 31.5% of cases.

Table (8): EEG recording in16 studied patients.

	Frequency	Percent
Active generalized epileptogenic activity.	6	37.5
Bitemporal epileptogenic focus	2	12.5
Left fronto-temporal epileptogenic focus	1	6.25
Normal	7	43.75

Table (8) shows EEG recording in16 studied patients, active generalized epileptogenic activity is the most common and represents 37.5% of cases



Figure(11) shows MRI findings

Table (9): Classifications of patients according to outcome (neurological assessment)

Outcome	Frequency	Percent
Poor outcome(neurological impairment)	10	25
Good outcome (neurologically normal)	30	75.0
Total	40	100.0

Table (9) shows that poor outcome (7 cases neurological impairment and 3 cases dead) in 25% of cases and good outcome (neurologically normal) in 75%of cases.

Table (10): Classifications of outcome (neurological assessment) according to sex.

Outcome / Sex	Poor outcome		Good outcome		Total	
	No	%	No	%	No	%
Male	5	50.0	18	60.0	23	57.5
Female	5	50.0	12	40.0	17	42.5
Total	10	100.0	30	100.0	40	100.0

Table (10) shows there is no significant differences between both sex as ($P > 0.05$) Chi-square (X^2) = 0.307.

Figure (12)Outcome

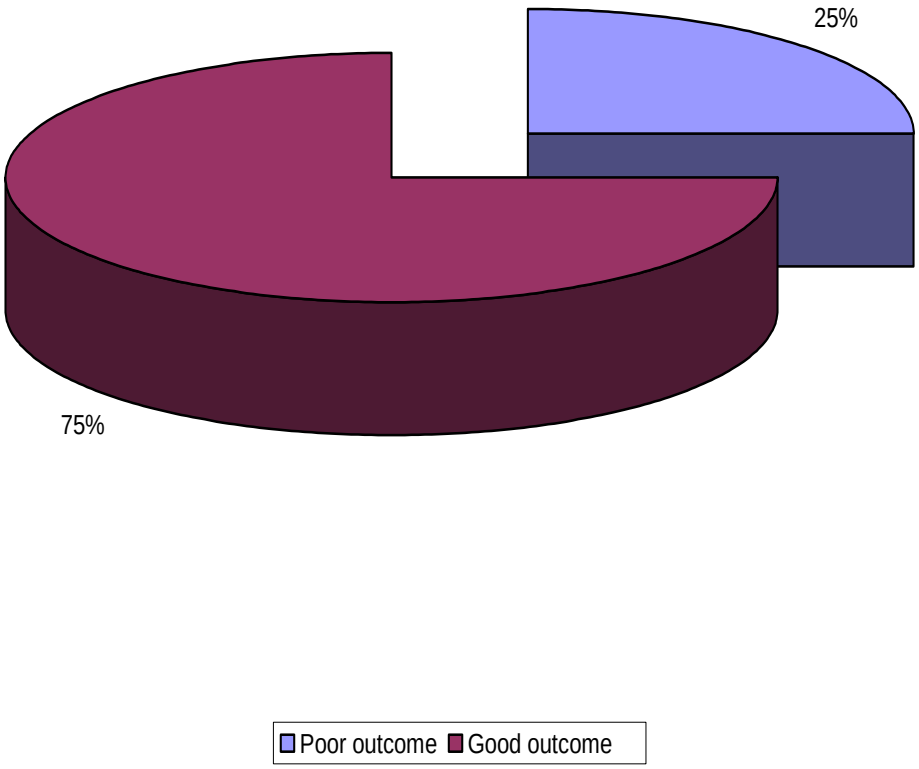


Figure (12) shows classifications of patients according to outcome (neurological assessment)

Table (11): Classifications of outcome (neurological assessment) according to type of convulsion

Outcome / type of convulsion	Poor outcome		Good outcome		Total	
	No	%	No	%	No	%
Myoclonic	1	10.0	1	3.3	2	5.0
Focal	0	0.0	2	6.7	2	5.0
generalized,tonic-clonic	9	90.0	27	90.0	36	90.0
Total	10	100.0	30	100.0	40	100.0

Table (11) shows relation between types of convulsion and outcome**,** this relation is not statistically significant as P >0.05, (Chi-squarex2=1.33).

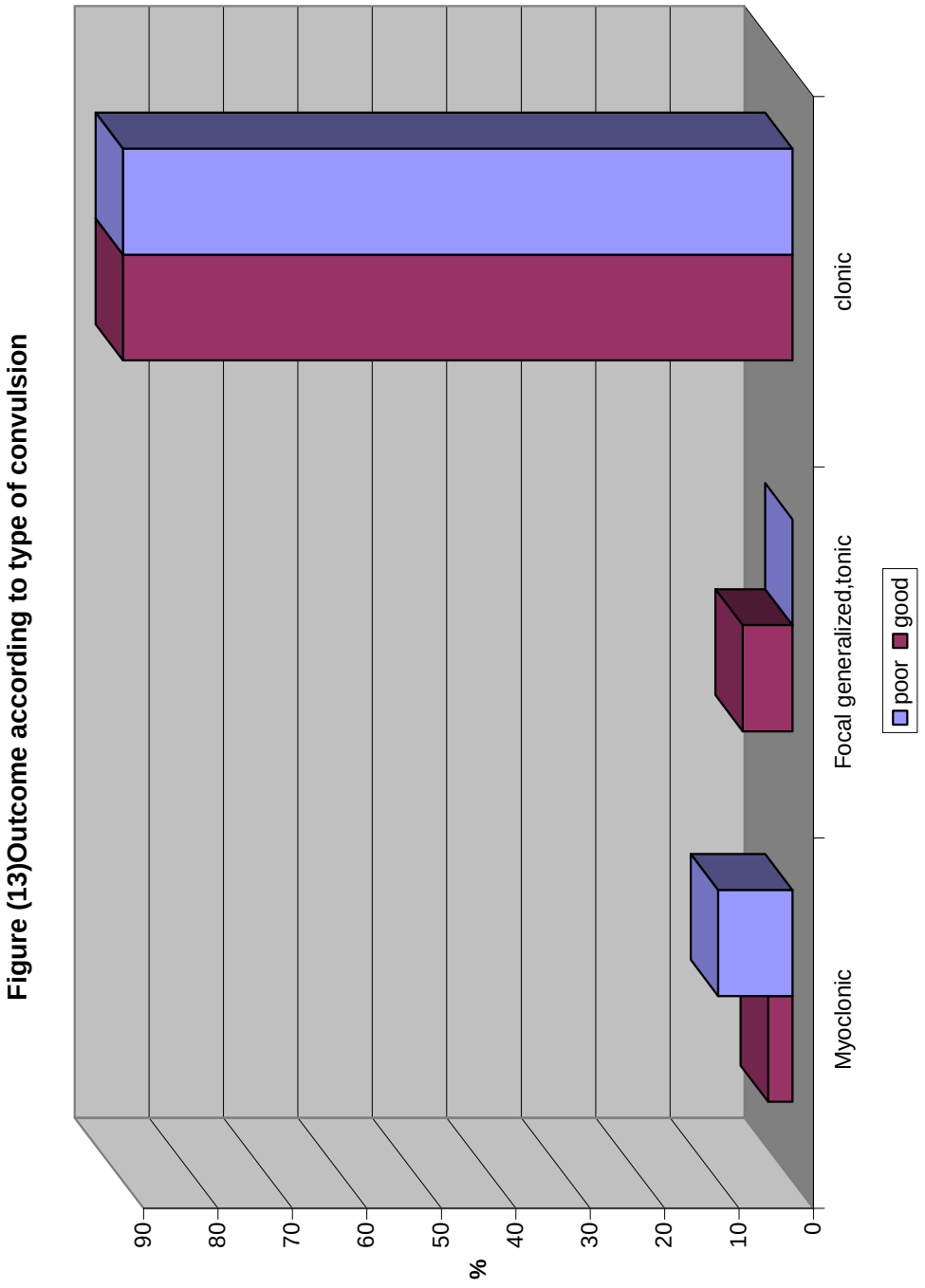


Figure (13) shows outcome according to type of convulsion

Table (12): Classifications of outcome of status epilepticus according to etiology.

Outcome Classification of SE	Poor outcome		Good outcome		Total	
	No	%	No	%	No	%
Acute symptomatic	4	40.0	10	33.3	14	35.0
Idiopathic, epilepsy-related	1	10.0	8	26.6	9	22.5
progressive encephalopathy	1	10.0	3	10	4	10.0
prolonged febrile convulsion	0	0.0	4	13.3	4	10.0
Remote symptomatic	3	30.0	2	6.6	5	12.5
Unclassified	1	10.0	3	10	4	10.0
Total	10	100.0	30	100.0	40	100.0

Table (12) shows classifications of outcome of status epilepticus according to etiology**,** these relation are highly statistically significant i.e. P <0.001, (Chi-squarex2=21.45)

Figur (14)Outcome according to Classification of SE

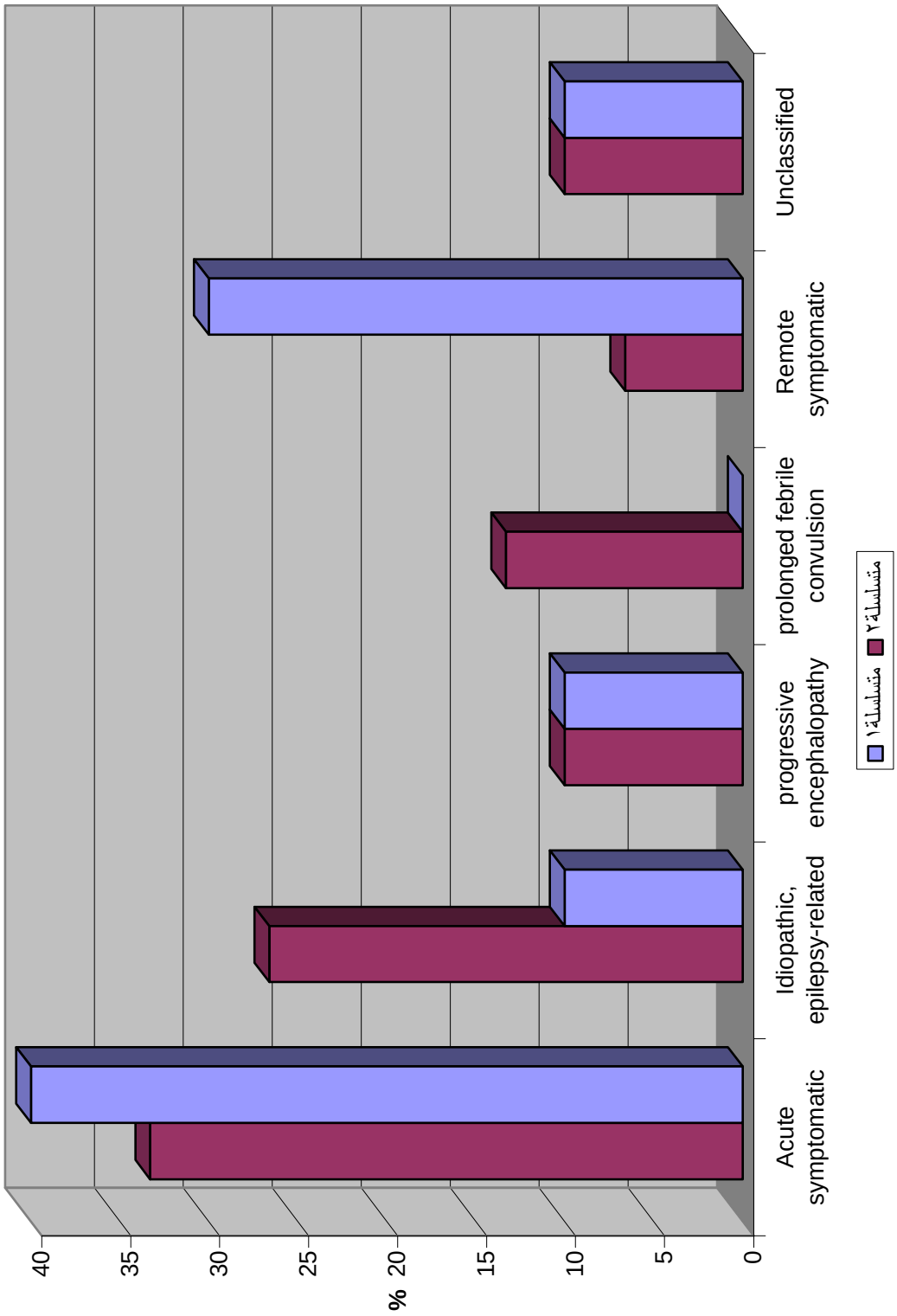


Figure (14) shows outcome according to classification of SE

Table (13): Relation between different variables in study groups and outcome.

Outcome / different variables	Poor outcome mean ± SD	Good outcome mean ± SD	Test of significance	
			t	p
Age (months)	2.3±1.2	5.6±4.5	1.48	<0.05
Duration of hospitalization (days)	8.2±5.1	7.9±3.6	0.17	>0.05
Head circumference (Cm)	41.9±5.7	46.3±6.2	2.24	<0.05
Weight(Kg)	6.97±1.9	13.9±9.3	3.85	<0.001

Table (13) shows relation between different variables in study groups and outcome this relation was statistically significant for age**,** head circumference**,** and weight as P <0.05 and none statistically significant for duration of hospitalization as P >0.05.

Table (14): Factors affecting outcome of status epilepticus.

	Total	Poor outcome		Good outcome		P value	Odds ratio
		No	%	No	%		
Sex							
Male	23	5	50.0	18	60.0	>0.05	١.5
female	17	5	50.0	12	40.0		
Age (mean and SD) (months)		2.3±1.2		٨.6±4.5		<0.05	٢.1
Seizure type:							
Generalize tonic clonic	36	9	90.0	27	90.0		
Focal	2	0	0.0	2	6.7	>0.05	0.4
Myoclonic	2	1	10.0	1	3.3		
Refractory S.E	10	7	70	3	30	<0.05	2.3
Duration of S.E							
<1hr	30	3	10	27	90	<0.05	21
>1hr	10	7	70	3	30		
Mean hospitalization days		8.2±5.1		7.9±3.6		>0.05	0.2

Table (14) shows age**,** refractory status epilepticus and duration of status epilepticus affected outcome significantly as P <0.05and none significantly for sex**,** seizure type and mean hospitalization days as P >0.05.

Table (15): Comparison between numbers of dead and alive in different age groups

	Dead		**Alive**		**P. value**
	No	**%**	**No**	**%**	
<2 years	3	100%	22	59.4	>0.05
3-5 years	0	0	11	29.7	>0.05
6-10 years	0	0	4	10.8	>0.05
11-15 years	0	0	0	0	>0.05

Table (15) shows non significant differences between numbers of dead and alive in different age groups as P >0.05.