RESULTS

RESULTS

Table (I) summarizes the clinical, laboratory and neuro-radiological findings of our 39 hemiplegic patients. According to C.T. findings, we could classify our patients into the following aetiological groups:

* 2I cases (53.84 %) cerebral infarction
* 7 cases (I7.94 %) brain atrophy
* 3 cases (7.69 %) brain abscess
* 2 cases (5.I2 %) brain glioma
* 4 cases (I0.25 %) normal C.T. finding
* 2 cases (5.I2 %) including one case of meningoencephalitis and the other of multiple shadows of the brain.

Our clinical results were statistically analyzed and tabulated as follows:

Regarding sex predilection, male to female ratio was 2:I Table (2) shows that lesions occured on left side in 28 cases (7I.8 %) and on right side in II cases (28.2 %). While table (3) and (4) show that fever and convulsions occuring at the onset of the attack as an associated symptom were present in 23 cases (58.97 %). But table (5) shows that presentation with loss of consciousness was found only in I0 cases (25.64 %). But there was no history of previous similar episodes and one could not elicit any prodroma and/or transient ischemic attacks.

Regarding the mode of onset of the attack it was sudden in 27 cases (69.23 %), while the rest had an insidious onset (table 6). But the duration of the disease varied from one week to 24 monthes with an average of (4 monthes).

As shown in table (7) I4 cases have stationary course (35.9 %), while 8 cases (20.5I %) were regressive, but I7 cases (43.39 %) showed progressive course.

Mental subnormality as an associated symptom could be detected in 7 cases (I7.94 %), but it is associated with aphasia in another 5 cases (I2.82 %).

Examination of the motor system revealed classic hemiplegia, cranial nerves involvement was detected in I3 cases (33.33 %), II cases showed upper motor neurone lesion of facial nerve, while one case showed only bulber paralysis, and another case showed crossed hemiplegia with lower motor neurone lesion of the sixth and seventh cranial nerves.

Examination of the sensory system revealed hemianaesthesia in 5 cases, but this is subjected to great error as children were extremely uncooperative.

Fundus examination was normal except in 6 cases showed evidence of papilloedema which proved by C.T. scan to be 3 cases of brain abscess, 2 cases of brain glioma & last one shows multiple deposits ?? Tuberculoma.

But we could not comment on visual field defect as children were incooperative.

Computed tomography with and without contrast were performed for all patients. Cerebral infarction was met in 21 cases (53.84 %) with the presence of lower attenuation lesions surrounded by little oedema in early stage and having localized widening of the nearby ventricle and cerebral sulci in old stages (Fig. 3) case no.8

Cerebral atrophy was even seen in 7 caes (17.97 %) with widening at the involved cerebral ventricles, cortical sulci, interhemispheric and Sylvian fissure and also at the basal cisterns (Fig. 4) case no.25

Cerebral abscess was seen in 3 cases (7.69 %), it showed central area with low attenuation value and a marginal rim of contrast enhacement (Fig. 5) case no.30

Brain gliomas were proved by C.T. scan in two cases, case no. 32 and no. 33

C.T. of case no. 32 Fig. 6 revealed a brain stem glioma, while case no. 33 showed glioma in the right fronto-parietal region.

Meningoencephalitis was seen in one case with multiple cortical area of low attenuation value in both frontal regions, with multiple ring enhancement (Fig. 7) case no. 38, and another case showed multiple enhancing deposits, while in four patients there was normal C.T finding.

One case (case no. II) showed marked pallor and petecheal haemorrhages and proved by bone marrow puncture to be acute lymphoplastic leuhemia, C.T. picture revealed right fronto-parietal infarction and multiple deposits?? leukemic deposits.

Angiomatous malformation was detected in two cases (case no. 23, 26) which proved to be Sturge Weber Sydrome. C.T. picture revealed cortical atrophy.

While cyanosis was seen in (case no. 30) which proved to be congenital cyanotic heart disease (Fallot's tetralogy) complicated by right parietal cerebral abscess as seen in C.T. picture (Fig. 5).

Infection was present in 5 cases two of them had severe gastroenteritis and dehydration, while the rest had chest infection.

Angiogram was done only to a few patients,one of them case no. 2 showed internal carotid artery occlusion (Fig. 8), while C.T. of the same patient revealed left fronto-parietal infarction (Fig. 9). This patient was a female called Samia El-Sayed Aly, four years old. She was presented by right side hemiplegia with right upper motor neurone facial affection of acute onset, regressive course and two monthes duration. The condition was preceded by fever for seven days and generalized

rash which was diagnosed as measeles, there was a history of bulber affection in the form of shocking, nasal regurge and hoarsness of voice, but these symptoms had markedly improved. On examination, the general condition was within normal, the cranial nerves were free except for right upper motor neurone facial lesion and slight dysphonia and nasal tone, there was weakness of the right side which was more marked in the upper than in the lower limb.

The reflexes were exaggerated on the right side with positive Babiniski sign. The sensations were diminished on the right side. Routine laboratory investigations (blood pictures, urine and stool) were normal. The fundus examination and the plain X-ray skull were also normal, the C.T.scan revealed left fronto-parietal infarctions and the cerebral angiography showed internal carotid artery occlusion.

TABLE (2): CACES OF INFANTILE HAEMIPLEGIA BY CAUSE ACCORDING TO LATERALITY

CT. SCAN	LEFT		REGHT		TOTAL	
	No.	%	No.	%	No.	%
Normal	3	75.00	11	25.00	4	100.00
Infarction	15	71.43	6	28.57	21	100.00
Abscess	3	100.00	00	0.00	3	100.00
Atrophy	3	42.86	4	557.14	77.1	100.00
Glioma	22	100.00	0	0.00	2	100.00
Others	2	100.00	0	0.00	2	100.00
Total	28	71.79	11	28.21	39	100.00

TABLE (3): CASES OF INFANTILE HAEMIPLEGIA BY CAUSE ACCORDING TO FEVER.

CT. SCAN	POSITIVE		NEGATIVE		TOTAL	
	No	%	No.	%	No.	%
Normal	2	50.00	2	50.00	4	100.00
Infarction	14	66.67	7	33.33	21	100.00
Abscess	2	66.67	1	33.33	3	100.00
Atrophy	3	42.86	4	57.14	7	100.00
Glioma	1	50.00	1	50.00	2	100.00
Others	1	50.00	1	50.00	2	100.00
Total	23	58.97	16	41.03	39	100.00

TABLE (4): CASES OF INFANTILE HAEMIPLEGIA BY CAUSE ACCORDING TO CONVULSINGS

8888

CT. SCAN	PRESENT		ABSENT		TOTAL	
	N0;	%	No.	%	No.	%
Normal	2	50.00	2	50.00	4	100.00
Infarction	11	52.38	10	47.62	21	100.00
Abscess	3	100.00	0	0.00	3	100.00
Atrophy	4	57.14	3	42.86	7	100.00
Glioma	1	50.00	1	50.00	2	100.00
Others	2	100.00	0	0.00	2	100.00
Total	23	58.97	16	41.03	39	100.00

TABLE (5): CASES OF INFANTILE HAEMIPLEGIA BY CAUSE ACCORDING TO COMA

CT. SCAN	PRESENT		ABSENT		TOTAL	
	No.	%	No.	%	No.	%
Normal	0	0.00	4	100.00	4	100.00
Infarction	5	23.81	16	76.19	21	100.00
Abscess	2	66.67	1	33.33	3	100.00
Atrophy	3	42.86	4	57.14	7	100.00
Glioma	0	0.00	2	100.00	2	100.00
Others	0	0.00	2	100.00	2	100.00
Total	10	25.64	29	74.36	39	100.00

TABLE (6): CASES OF INFANTILE HAEMIPLEGIA BY CAUSE ACCORDING TO ONSET.

CT. SCAN	INSID.		SUDEN		TOTAL	
	No.	%	No.	%	No.	%%
Normal	3	75.00	1	225.00	4	100.00
Infarction	5	23.81	16	76.19	21	100.00
Abscess	1	33.33	2	66.67	3	100.00
Atrophy	2	28.57	5	71.43	7	100.00
Glioma	2	100.00	0	00.00	2	100.00
Others	1	50.00	1	50.00	2	100.00
Total	12	30.77	27	69.23	39	100.00

TABLE (7): CASES OF INFANTILE HAEMIPLEGIA BY CAUSE ACCORDING TO COURSE.

CT. SCAN	STATION. No.	%	REGRES. No.	%	PROGRES. No.	%	TOTAL No.	%
Normal	1	25.00	2	50.00	1	25.00	4	100.00
Infarction	9	42.86	5	23.81	7	33.33	21	100.00
Abscess	1	33.33	1	33.33	1	33.33	3	100.00
Atrophy	2	28.57	0	0.00	5	71.43	7	100.00
Glioma	0	0.00	0	100.00	2	100.00	2	100.00
Others	1	50.00	0	0.00	1	50.00	2	100.00
Total	14	35.90	8	20.51	17	43.59	39	100.00

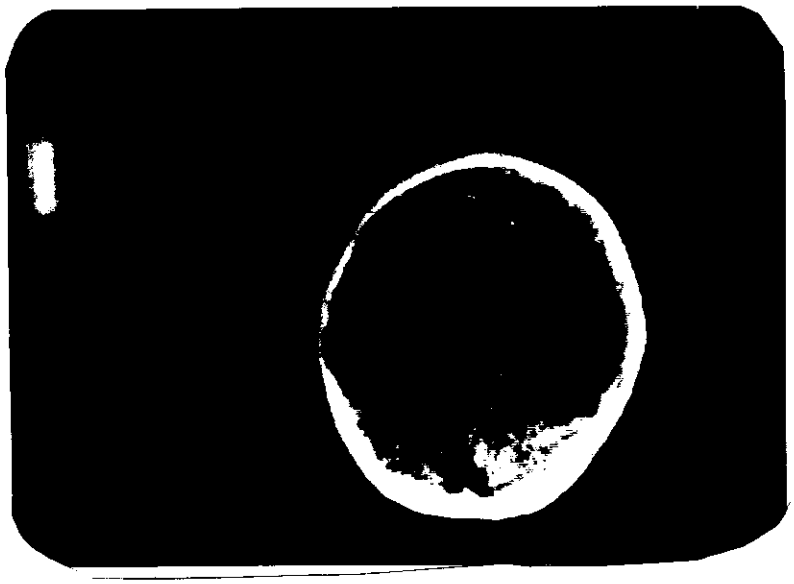

Fig. (3) case No. 8

shows right cerebral infarction

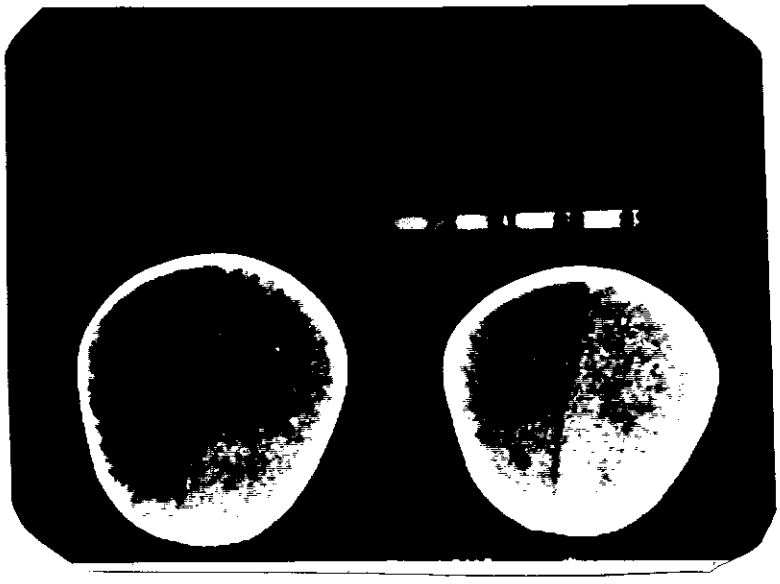

Fig. (4) case No. 25

shows left sided hemiatrophy

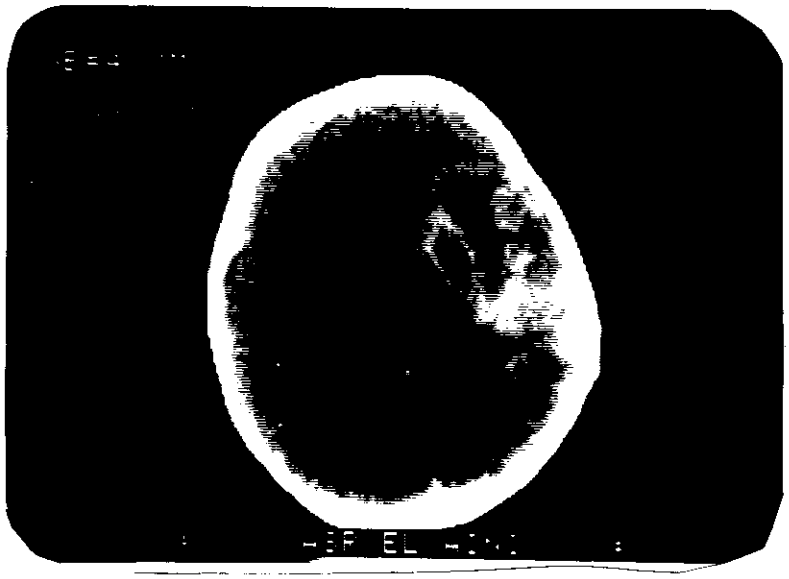

Fig. (5) case No. 30

shows right parietal abscess

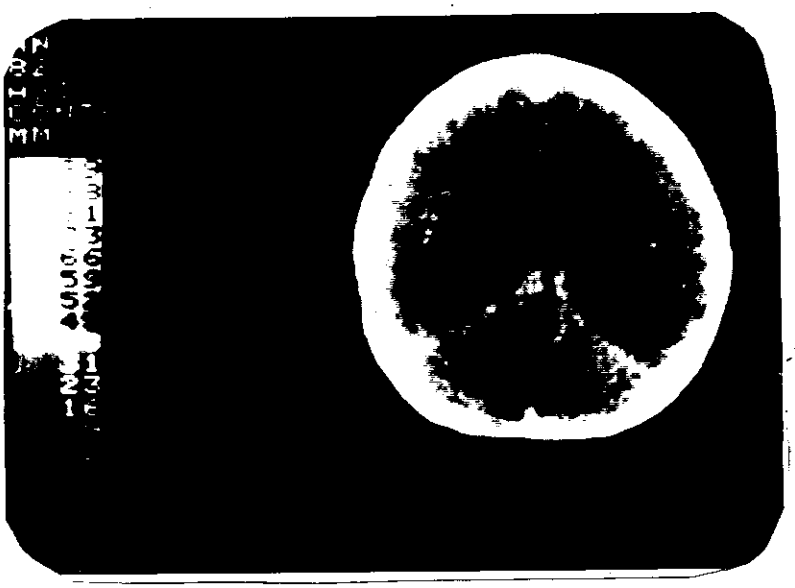

Fig. (6) case No. 32

shows brain stem glioma

Fig. (7) case No. 38

shows bilateral frontomeningeoencephalitis

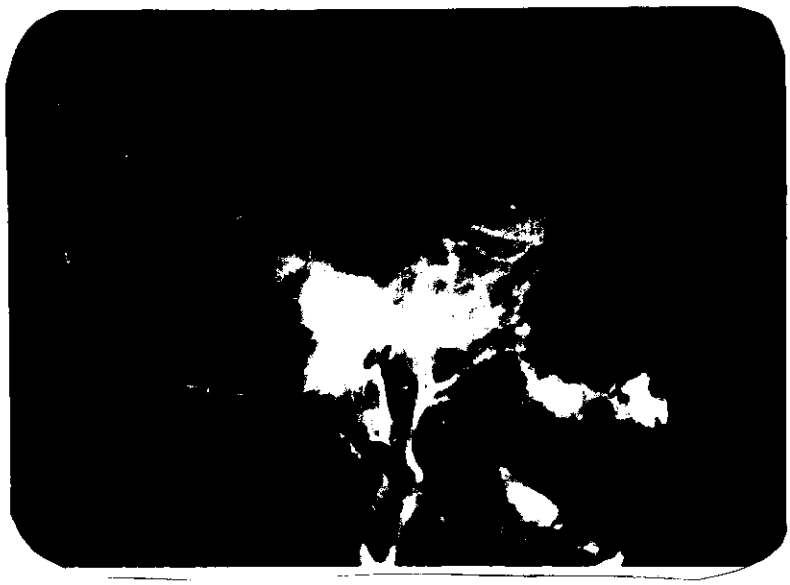

Fig. (8) case No. 2

shows cerebral angiography with

internal carotid artery occlusion

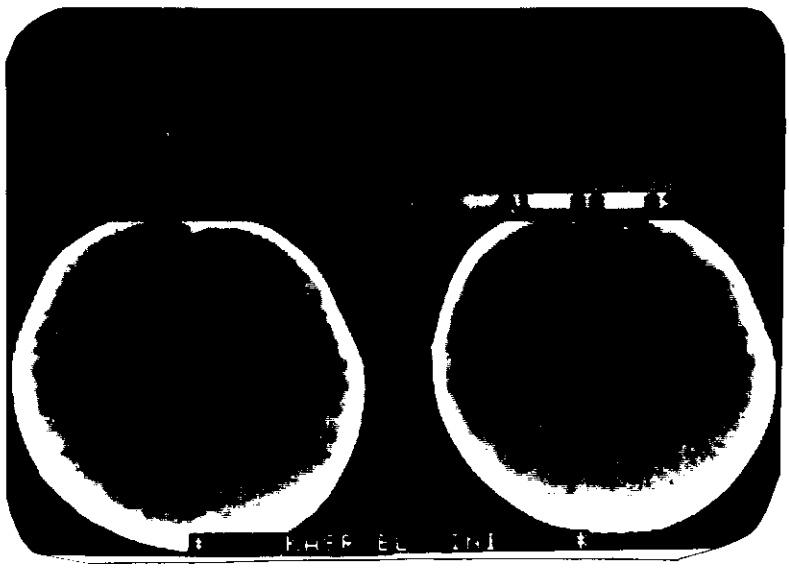

Fig. (9) case No. 2

shows left frontoparietal infarction