accounted for 20% of ICSOL and NCC 60%.Fromthe above statistics it is evident that this incidence of lCSOL of granulomatous origin is quite high in this region compared to neoplasms. Surprisingly, in the present study NCC contributed for 60% of ICSOL- This is in contrast to a study in AIIMS[11] where NCC formed only 2.5% of all ICSOL[11]. This shows high prevalence of NCC in this region.

NCC is the commonest parasitic disease of central nervous system and is being diagnosed with increasing frequency after the advent of computerized tomography (CT). In our study majority of ICSOL is due to cysticercosis comprising 6O% (24out of 40) of ICSOL, with male preponderance (15 males, 9 females). All but one case were presented with convulsions. 5 out of 24 NCC cases showed pyramidaltract signs. 14 cases had signs of raised intracranial tension., signs of meningealirritation noted in one case. AII the clinical signs and symptoms are well correlated

Table 4: Comparitive study of neurocystecercosis with respect to clinical and CT Characteristics

Characteristics	Present Study		Puri et al[18]	
	n	%	n	%
Total cases	24	100	27	100
Male	15	62.5	13	48.1
Female	9	37.5	14	51.9
Seizures	23	95.8	21	77.7
Features of raised ICT	14	58	15	55.5
Pyramidal signs	5	21	7	25.9
Signs of meningeal irritation	1	4.2	4	14.8
Solitary lesions	18	75	2	7.4
Multiple lesions	6	25	25	92.6
Hydro cephalus	1	4.2	5	18.5

With the study of Puri et al 18. In our study 18 out of 24 cases (75%) of NCC had solitary lesions in contrast to the study of Puri et al where 92.6% were multiple lesions as shown in the table. (Table 4)

In this study, of 24cases of NCC history of pork eating is present only in 3cases. AII the other cases maybe due to food contamination with eggs of T.solium. It is worth mentioning that tuberculomas still constitute a large percentage of ICSOL of childhood in most series reported from India. [Dastur (1967) 46.4%, Ramamurthy (1970) 44%, Rao (1970) 30.6%, Bagchi (1965)17.5%]In northern India, the incidence is comparatively much lower [Tandon e t al (1970) less than6%] .(Table 5).

Table 5: Incidence of Brain Tuberculomas as Percentage of ICSOL in Children in Different Centres

	Total cases of ICSOL	*No. of Tuberculoma Cases*	*% of Tuberculoma*
1.Dastur et al Bombay (1966)	252	117	46.4
2.Dastur and Lalitha (1973)	127	39	30.7
3.Institute of Neurology Madras (1970)	100	44	44
4.Bagchi, Calcutta (1965)	63	11	17.5
5.Present Study	40	8	20

In our study incidence of tuberculoma is 20% (8cases out of 40 cases of ICSOL). In our study out of 8 cases of tuberculomas 6 were females (75%)

Table 6: Comparative study of intracranial tuberculoma with respect to clinical and CT Characteristics

Characteristics	*Present Study*	*Margeret A. Whelan et al 17*
Sample Size	8	8
Focal neurological signs present in	6	6
+veMantoux test	2	7
CSF pleocytosis	3	3
Calcified lesions	1	0
Ventricular enlargement	2	5
Cerebral edema	6	7
Supratentorial lesions	6	7
Infratentorial lesions	1	1
Both sites	1	0
Multiple lesions	1	2

The above table shows the clinical and CT characteristics are well correlated with the study of Margaret A. WheIan*et al* [17]. In our study only two cases showed positive response to mantoux test. This may be due to malnutrition. In our study out of 8 cases with tuberculomas, 4 were unimmunized and 6 had protein energyrnalnutrition and 2 had history of contact with tuberculosis. Thus tuberculomas are commonlyassociated with PEM and unimmunisation .

Intracranial neoplasms were noted in 5 cases out of 40 cases of ICSOL. 2cases had cerebellarmedulloblastoma, craniopharyngioma, brain stem glioma and cerebellar astrocytoma/ependymoma in one case each. In our study the incidence is more infemales (4 females. 1 male). Out of 5 cases with neoplasms 4 cases (80%) hadinfratentorial lesion which is the commonest site for childhood tumors and the only supratentorial lesion is craniopharyngioma, which is the commonest supratentorialIesion in children. Only one case (medulloblastoma), out of 40 ICSOL , presented with only vomitings without any positive neurological signs.

In the present study, an 8 year girl with congenital cyanotic heart diseasewas presented with high fever and left hemiparesis. Later CT revealed brainabscess in the right fronto - parietal region which is the commonest site for brainabscess. A ten year old boy admitted with complaint of chronic headache withoutany other signs and symptoms of ICSOL. In this case CT revealed arachnoid cystin the right sylvian fissure.

In our study supratentorial lesions were more common than infratentorial lesions (Table 7). 34 cases (85%) had supratentorial lesions out of 40 cases.

Table 7: Comparative study of ICSOL in children

Type of ICSOL	Dastur et al					Present Study				
	Total Cases	Supra tentorial	%	Infratentorial	%	Total Cases	Supra tentorial	%	Infratentorial	%
Neoplasms	124	56	45	68	55	5	1	20	4	80
Tuberculomas	115	40	34.8	72	62.6	8	6	75	1	12.5
Other lesions	5	3	60	2	40	27	27	100	-	-

In our area the incidence of granulomatous lesions is more than neoplasms. Most of granulomatous lesions, 31 out of 33 cases (97%) were presented as supratentoriallesions. Majority of neoplasms are infratentorial; 4 out of 5 cases (80%). Thus the commonest site for granulomatous lesions is supratentorial region where as in neoplasms it is infratentorial region.

The commonest site for ICSOL in the cerebrum is parietal lobe 10 cases (25%) followed by frontal lobe 9 cases (22.5%)inour study. Both frontal and parietal lobes were involved in 4 cases (10%)

The commonest presentation of frontal lobe lesions is simple partial seizure(5 out of 9 cases) 55.5% followed by complex partial seizures (3 out of 10 cases) 33.3%.Most of the patients with parietal lobe lesions were presented with complex partial seizures 50% (5 out of 10 cases) followed by generalized seizures 30% (3 out of 10cases). Majority of patients with infratentoriallesions were presented with signs and symptoms of raised intracranial tension (3 out of 5) 60%, and 2 cases (40%) with generalized seizures.

The present study showed almost equal distributions in left, and right sides (14Ieft sided lesion, 15 right sided lesions). Midline lesions were found in 5 cases, all are neoplasms. In the present study majority of multiple lesions were due to cysticercosis (6 out of 8 cases) 75%, next being tuberculomas1 out of 8 (12.5%).

6. Conclusions

The incidence of ICSOL below 5 years is very low. After 5 years, the incidence is high between 6-8 years and 10-12 years. There is no sex predilection as the incidence is almost equal in male and female children. Convulsion is the commonest presenting symptom of ICSOL more so with Granulomas. Symptoms of raised ICT like headache, vomiting, and squint are more commonly seen in neoplasms compared to granulomas.

Neurological signs like pyramidal tract involvement, 6th cranial nerve paralysis and pailloedema are more commonly seen in neoplasms compared to granulomatous lesions. Frontal lobe lesions mainly present with simple partial seizures where as parietal lobe lesions present as complex partial seizures or generalised seizures. The incidence of granulomatous lesions is very high in this region. The incidence of brain tumor as ICSOL is quite low. Neurocysticercosis is the commonest granulomatous lesion seen in this region fallowed by tuberculoma. Most of the cases of NCC present with convulsions (95.8%). Cases of NCC are less commonly associated with features of raised ICT and focal neurological deficit compared to tuberculoma and neoplasms. More than pork eating, probably food and water contamination with of T.solium is the important source of NCC in this region. CT scan is the most important tool for the diagnosis of NCC

The incidence of tuberculoma is as a percentage of ICSOL has come down in the recent times, but is a still considerable number. Tuberculoma is occurring more commonly in un immunized and children with PEM. Granulomatous lesions occur more commonly insupratentorial lesions whereas neoplasm in infratentoriallesions. Frontal and parietal lobes are the common sites of involvement in supretentoriallesions. Granulomatous lesions involve both sides almost equally. Most of the midline lesions are neoplastic in origin. Multiple site involvement is more common with NCC.

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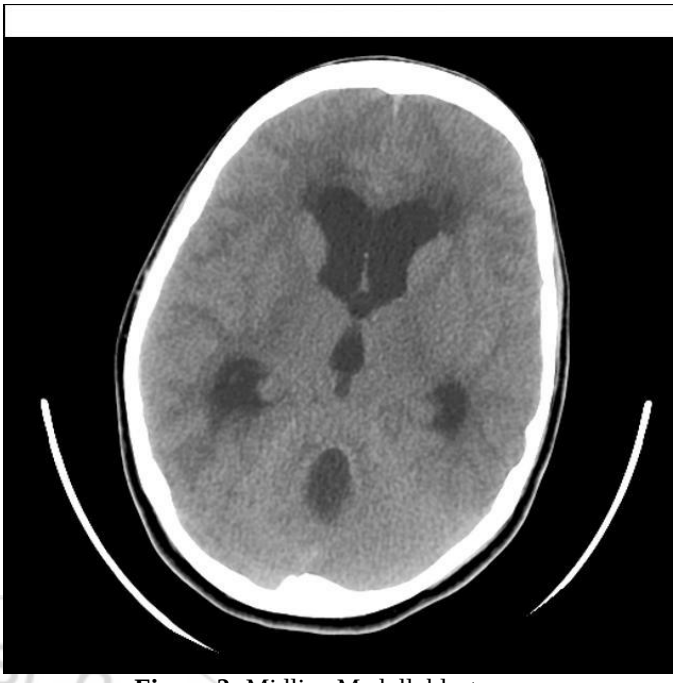

Figure 2: Midline Medulloblastoma

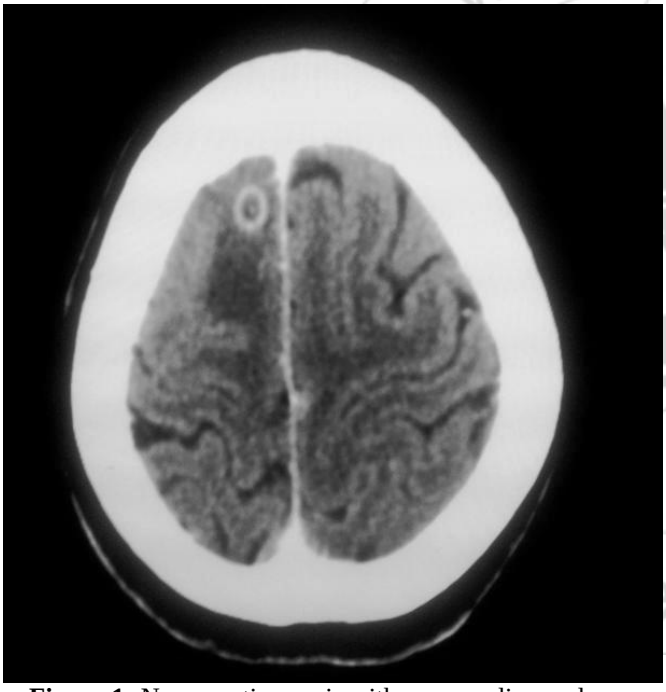

Figure 1: Neurocysticercosis with surrounding oedema