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Review Article & Case

Dilemma between Tuberculoma & Multiple NCC with Complicated Case in JLNMCH, Bhagalpur

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Abstract
Aim: *To study in details the dilemma between multiple neurocystycercosis (NCC) & tuberculoma.*
Materials & Methods: *Blood, ELISA FOR NCC,CECT SCAN, MRI SCAN,MRS & Others*
Conclusion: *Dilemma between tuberculoma and multiple NCC is common in India. Even though there is advancement in medicine and imaging still the uncertainty continues between NCC & tuberculoma. Our patient finally after so many opinions& investigation is diagnosed as a case of multiple NCC with Meningitis. CECT scan s/o NCC as most of lesions are resolved and also IgG for NCC is positive. Lumbar puncture/CSF examination suggestive of tubercular meningitis. Fundoscopy showing papilloedema which was in favor of meningitis again. So to conclude it we are pointing towards the association between NCC and tubercular meningitis.*
Keywords: *NCC: Neurocysticercosis; TBM: Tubercular Meningitis.*

Background

Multiple ring-enhancing lesions in the brain have been a topic of debate for differentiating between tuberculoma and neurocysticercosis for long. Spontaneous resolution of the ring-enhancing lesions is considered as a major criterion for diagnosis of neurocysticercosis. We report a rare case of multiple ring-enhancing lesions in the brain, which was initially diagnosed as a case of neurocysticercosis but reconsidered as a case of tuberculoma which finally concluded as a case of NCC with TBM.

Case Details

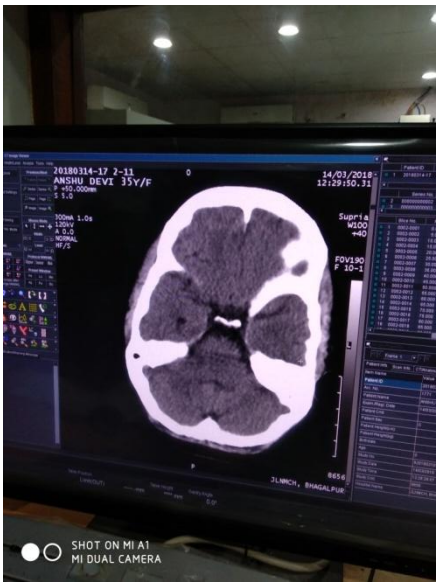
35 yrs female ANSHU DEVI immunocompitant (HIV NEG) admitted in JLNMCH, BGP with c/o: headache since 6 month, altered sensorium since 1 day but no convulsions, fever & meningeal signs was diagnosed as NCC on CT SCAN (P/C) & treated with albendazole, dexona & epsolin, relieved & discharged.

Pt was readmitted 2nd time after 12 days with complains of headache & vomiting without convulsion, fever and meningeal signs & was diagnosed as NCC on CTSCAN (P/C) again but when undergone CEMRI it reveals multiple tiny round to oval ring enhancing lesions with mild surrounding edema scattered diffusely in B/L cerebral & cerebellar hemisphere, brainstem, basal ganglia & thalami showing restriction on DWI images…suggesting infective granuloma (TUBERCULOMA) & started ATT drugs with dexona and discharge after relieving of symptom.MRS also concluded tuberculoma.

Pt was admitted for 3 rd time with similar c/o headache but this time with convulsions (GTCS) two times/d treatment continued for tuberculoma but after 4 days of treatment pt develop mixed Stevens -johnson $ &TEN $ & all drug treatment stopped . Pt was treated symptomatically in ICU with anti histaminics, dexona & topical eye and skin treatment ,pt responded to the treatment & shifted to general ward f/b discharged by continuing the treatment of NCC for 6 wks as report of ELISA FOR NCC is positive for IgG.

Pt. is now admitted for 4th time after taking treatment for 6 wks of NCC with c/o diminution

of vision since five days and headache f/b convulsions one attack/day not associated with fever but irritable with no other meningeal signs we have undergone lumbar puncture which came out with tubercular meningitis this time and we started treatment ATT with pyrazinamide 1000mg & streptomycin 0.75 gm f/b rifampicin 450mg after three days f/b levofloxacin 500 mg so we by exclusion made isoniazide as culprit drug for drug allergic reaction which was developed during the previous admission time.we also undergone ophthalmic opinion which came out to be grade 2 papilloedema in both eyes .CECT finding this time suggests the multiple ring enhancing lesions have resolved mostly around 80% of previous CECT findings



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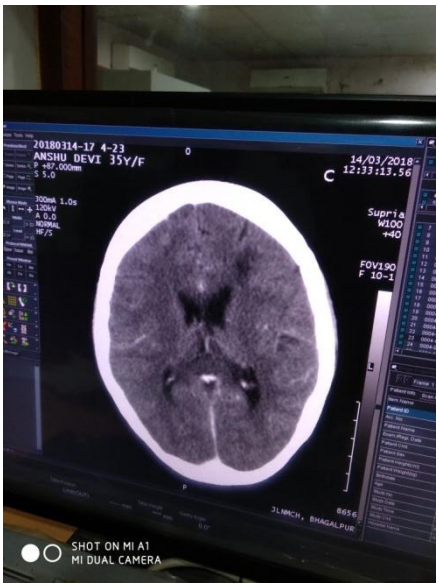


Examination Details: (fourth time admission details)

G/E: pt is conscious, cooperative w.o.t. time, place, person. vitals r normal.

(Afebrile & diminished vision)

S/E: Normal (CVS;RS;P/A;CNS)

FUNDOSCOPY: Papillodema PRESENT

Investigations

CXR: N; ECG: N; CBC: N ABG: N; RBS: N

LP CSF Finding: TUBERCULAR MENINGITIS

(Physical: COB WEB –PRESENT)

Chemical: GLUCOSE-29.01 mg/dl, PROTEIN-102.60 mg/dl,ADA-10.70 U/L

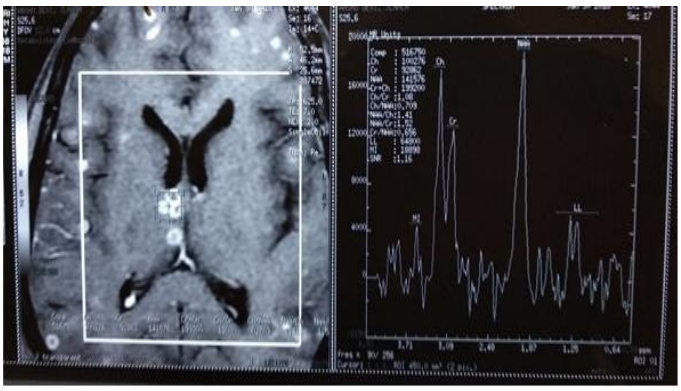
Microscopic: 378 cells/cumm, mostly lymphocytes 98%,RBC 02% GRAM & ZN STAINED SMEAR –N)

ELISA: IgG positive (0.460 OD units){positive > 0.3 OD units}

CT SCAN: INFECTIVE GRANULOMA (MULTIPLE NCC)

CEMRI: reveals multiple tiny round to oval shaped ring enhancing lesions with mild surrounding edema, scattered diffusely in b/l cerebral & cerebellar hemisphere, brainstem basal ganglia & thalami, showing restriction on DWI images ---s/o INFECTIVE GRANULOMA (TUBERCULOMA)

MRS: reveals mildly elevated choline and LL peak with normal appearing NAA &Cr peak---s/o INFECTIVE GRANULOMA (TUBERCULOMA)



Conclusion

1) Dilemma between tuberculoma and multiple NCC is common in india

2) Even though there in advancement in medicine and imaging still the uncertainty continues between NCC &tuberculoma
3) Patient is finally after so many opinions diagnosed as a case of multiple NCC with Meningitis
4) CECT scan s/o NCC as most of lesions are resolved and also IGg for NCC is positive
5) Lumbar puncture/csf examination s/o meningitis
6) Fundoscopy showing papilloedema which was in favor of meningitis

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