Gagandeep Singh, DM, FAMS, FRCP (London) Department of Neurology, Dayanand Medical College & Hospital, Ludhiana, India E mail: g.singh@ucl.ac.uk

Disclosures – Nil relevant

Learning Objectives

- To demonstrate knowledge of risk factors for, life cycle and evolutionary stages of the cysticercus.
- To demonstrate ability to make a diagnosis of neurocysticercosis, based on clinical features and serological and imaging studies.
- To demonstrate knowledge of the varied clinical and imaging presentations of cysticercosis.
- To demonstrate ability to recommend various treatments based on the clinical and imaging presentations and evolutionary stages of cysticercosis.

Key messages -1

- Seizures and epilepsy occur during all evolutionary stages of brain cysticercosis.
- Serological studies indicate exposure to cysticercosis; Imaging mostly confirms diagnosis of infestation but also identifies anatomical location and evolutionary stage of brain cysticercosis.
- Antihelminthic treatment hastens resolution of cysticercosis but its impact on seizure burden is less certain.
- Corticosteroids provide relief from inflammation-associated symptoms of cysticercosis and are warranted during treatment with antihelminthics

Key messages – 2

- Antiseizure medications are required to control seizures till such time that the cysticercuc completely resolves.
- Seizures and epilepsy are usually well-controlled with antiseizure medications but only very rarely may be drug-resistant.
- When epilepsy is poorly controlled, suspect associated hippocampal sclerosis or lesional epilepsy and assess for surgical treatment.
- Be mindful of drug-drug interaction while treatment neurocysticercosis

Key messages – 3

- Oxfendazole is a new antihelminthic drug, the efficacy and safety of which needs to be evaluated in future clinical trials.
- Upto 1/3rd of epilepsies in many endemic regions of the world may be attributed to cysticercosis.
- Cysticercosis is a preventable risk factor for epilepsies.
- Cysticercosis is amenable to prevention by improving sanitation, meat inspection and hygiene, corralling pigs, taenicidal treatment of human carriers and porcine vaccination.