



Guidance document for processing PM-JAY packages

Management of Acute encephalitis syndrome/ Acute encephalitis

Procedures covered/ procedure count: 3

Specialty: Pediatric Medical Management/ General Medicine

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price
Acute encephalitis syndrome	Acute encephalitis syndrome	M200078	MP004A	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-
Acute encephalitis	Infectious-uncomplicated	M200090	MP003A	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-
Acute encephalitis	Immune-mediated - uncomplicated	M200090	MP003B	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-

ALOS: 5 days

Minimum qualification of the treating doctor:

Essential: MD / DNB/ equivalent (Medicine/ Pediatrics/ Neurology)

Special empanelment criteria/linkage to empanelment module: None

Disclaimer:

ICMR has issued clinical guidelines for **Management of Acute encephalitis syndrome in Children** to be followed in country. For monitoring and administering the claim management process of **Acute encephalitis syndrome & Acute Encephalitis**, NHA shall be following these guidelines. This document has been prepared for guidance of PROCESSING TEAM and TRANSACTION MANAGEMENT SYSTEM of AB PM-JAY for the claims of procedures mentioned above. The ICMR guidelines are also included in the document for better understanding of the SHA teams, Insurance companies and TPAs. The hospitals can also refer to this document so that they have the insight on how the claims will be processed. However, this document doesn't provide any guidance on clinical and therapeutic management of patient. In that respect the hospitals and physicians may refer to the ICMR poster and other relevant material as per the extant professional norms.

PART I: Guidelines for Clinicians and Healthcare Providers

1.1 Objective:

The purpose of this section is to act as a guidance & a clinical decision support tool for the clinicians in deciding the line of treatment, plan clinical management of patient and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PMJAY and selection of corresponding Health Benefit Package.

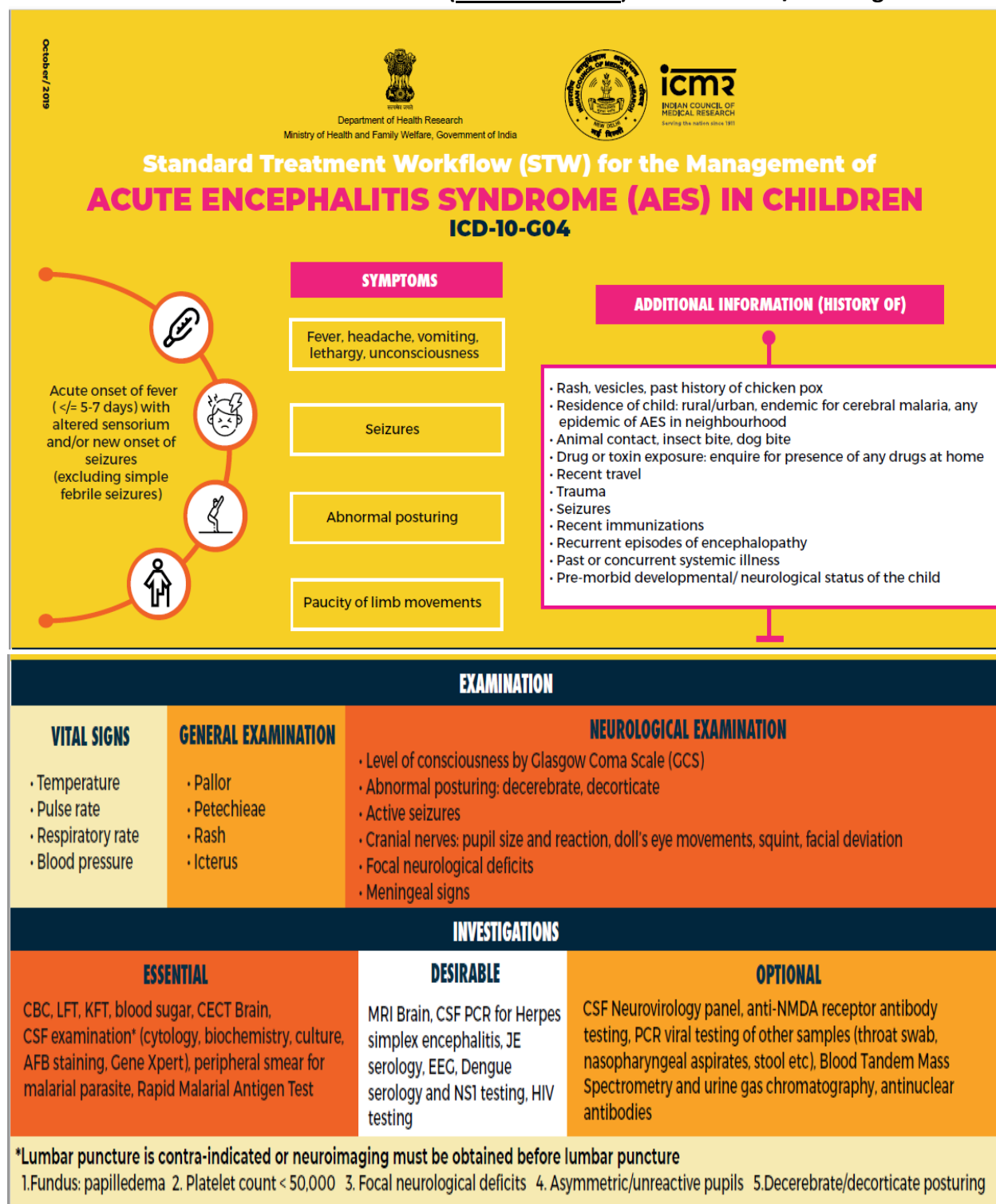


It will also serve as a tool for hospitals to determine and submit the mandatory documents required for claiming reimbursement of health benefit package under PMJAY.

1.2 Clinical key pointers:

- a. Proceed with management of Acute encephalitis syndrome/ Acute encephalitis only if diagnosis made is backed by clinical signs,
 1. Acute onset of fever (\leq 5-7 days)
 2. Mental confusion / Disorientation/ Delirium or coma
 3. Febrile Seizures
 4. Abnormal posturing
 5. Paucity of limb movement

1.3 STANDARD TREATMENT WORKFLOW (DHR-ICMR STW)ⁱ- For clinicians/ treating doctor



MANAGEMENT

All patients need to be admitted.

If any of the following signs are present, the child should be referred to tertiary care facility with PICU and facilities for mechanical ventilation:
• Glasgow Coma Scale < 8 • Abnormal breathing pattern • Shock not responding to fluid bolus • Decerebrate or decorticate posturing
• Seizures persisting despite benzodiazepine and phenytoin

Step I: Rapid assessment and stabilization

- Establish and maintain airway: Intubate if GCS<8, impaired airway reflexes, abnormal respiratory pattern, signs of raised intracranial pressure, SpO₂ <92% despite high flow oxygen and fluid refractory shock
- Ventilation, oxygenation
- Circulation: Establish IV access, take samples for relevant investigations, fluid bolus if in circulatory failure (20 mL/kg NS), inotropes if required
- Identify signs of cerebral herniation or raised ICP
- Temperature: treat fever and hypothermia
- Treat ongoing seizures- Benzodiazepine, followed by phenytoin loading

Step II: History, Examination and Investigations as given above

Step III: Empirical Treatment (must be started if CSF cannot be done/ report will take time and patient sick)

- Ceftriaxone: 100 mg/kg/day in 2 divided doses X 10-14 days
- Acyclovir (use in all suspected sporadic viral encephalitis):
3 mo to 12 y: 500mg/m² 8 hourly (min 21 days)
>12 y: 10mg/Kg 8 hourly (14-21 days in confirmed cases)**
- Artesunate combination therapy (stop if peripheral smear and RDT are negative): 3mg/kg in child <20 kg, and 2.4mg/kg in child > 20kg IV/IM at 0.12 and 24 hours, followed by once daily parental/oral X 3-7 days

**If therapy was started empirically stop acyclovir, in case an alternative diagnosis is confirmed, or HSV PCR of CSF is negative on two occasions (24-48 h apart) and MRI imaging not suggestive of Herpes Simplex Encephalitis

Step V: Prevention/treatment of complications and rehabilitation

- Physiotherapy, posture change, prevent bed sores and exposure keratitis
- Complications: aspiration pneumonia, nosocomial infections, coagulation disturbances
- Nutrition: early feeding
- Psychological support to patient and family

Step IV: Supportive care and treatment

- Maintain euglycemia, hydration and control fever
- Treat raised intracranial pressure#, mild head-end elevation-15-30°
- Treat seizures##; Give anticonvulsant if: history of seizures / GCS < 8 / child has features of raised ICP
- Steroids: Pulse steroids (methylprednisolone) to be given in children with suspected acute disseminated encephalomyelitis or autoimmune encephalitis

#Management of raised intracranial pressure

- Intubate if: GCS <8 / evidence of herniation / irregular respirations and inability to maintain airway
- Signs of impending herniation: patient to be hyperventilated to a target PaCO₂ of 30-35 mmHg
- Initial bolus of Mannitol(0.25 g/kg), then 0.25 g/kg q 6 h as per requirement, up to 48 hours.
- In the presence of hypotension, hypovolemia, and renal failure: hypertonic (3%) saline (preferable to mannitol) 0.1-1 mL/kg/hr by infusion; serum sodium to be targeted to 145-155 meq/L
- Adequate sedation and analgesia
- Avoid noxious stimuli
- Administer nebulized lignocaine prior to endotracheal tube suctioning

##Treatment of seizures

- 1st Line: IV Lorazepam 0.1mg/kg or Midazolam 0.2 mg/kg or Diazepam 0.3 mg/kg).
- If no IV access: IM Midazolam 0.2 mg/kg
- 2nd Line: Inj. Phenytoin 20 mg/kg (in Normal saline 1mg/kg/min)
- If seizures still persist:
Refractory status: Transfer to PICU -> midazolam infusion (1-18 microgram/kg/min)
- If ICU facilities not available: sodium valproate (20 mg/kg) or levetiracetam (20-40 mg/kg) or phenobarbitone (20mg/kg)

DISCHARGE CRITERIA

Hemodynamically stable

Improvement in consciousness

Afebrile

Has started eating and drinking orally

Seizures have subsided

Parents have been explained the supportive care and physiotherapy to be continued at home

👉 KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

REFERENCES

1. World Health Organisation. Acute Encephalitis Syndrome. Japanese encephalitis surveillance standards. January 2006. From WHO-recommended standards for surveillance of selected vaccine-preventable diseases. WHO/VGB/03.01. Available from: <http://www.who.int/vaccines-documents/DocsPDF06/843.pdf>
2. National Program for Prevention and Control of Japanese Encephalitis/Acute Encephalitis Syndrome 2014. Government of India Ministry of Health & Family Welfare Directorate General of Health Services National Vector Borne Disease Control Programme.
3. Sharma S, Mishra D, Aneja S, Kumar R, Jain A, Vashishtha VM. Consensus guidelines on evaluation and management of suspected acute viral encephalitis in children in India. Indian Pediatr. Nov 2012;49(11):897-910.
4. Sankhyani N, Vykunta Raju KN, Sharma S, Gulati S. Management of raised intracranial pressure. Indian J Pediatr. 2010 Dec;77(12):1409-16.

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal (stw.icmr.org.in) for more information.

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1.4 Mandatory documents- For healthcare providers

Following documents should be uploaded by the concerned hospital staff at the time of pre-authorization and claims submission:

Mandatory document	Acute encephalitis syndrome/ Acute encephalitis
i. At the time of Pre-authorisation	
Clinical notes with indications	Yes
Chest X Ray	Yes
Planned line of treatment	Yes
ii. At the time of claim submission	
Indoor case papers	Yes
CSF examination	Yes
CT Brain	Yes
Discharge Summary	Yes

PART II: GUIDELINES FOR PROCESSING TEAM

PART III: GUIDELINES FOR TRANSACTION MANAGEMENT SYSTEM (TMS)

3.1 Objective: To enable setting up of cross check mechanisms/rule engines within the IT platform (TMS) to ensure compliance with STGs and to prevent fraud / abuse of the Health Benefit Package.

3.2 Below mentioned are the scenarios where a provision would be built in TMS for pop-ups:

- I. Acute onset of fever (\leq 5-7 days)? Yes

Till the time the functionality is being developed, the processing doctors shall check the above manually.

^[1] Standard Treatment Workflows of India. 2019 Edition, vol. 1, New Delhi, Indian council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India. These STWs have been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the web portal (stw.icmr.org.in) for more information. © Indian Council of Medical Research and Department of Health Research, Ministry of Health & Family Welfare, Government of India.