



Guidance document for processing PM-JAY packages

Acute Encephalopathy Management

Procedures covered: 7

Specialty:

General Medicine / Pediatric Medical Management - Acute meningo encephalitis, Febrile encephalopathy, Metabolic encephalopathy, Hepatic encephalopathy

Pediatric Medical Management - Aseptic meningitis, Hypertensive encephalopathy, Brain Abscess

Package name	Procedure Name	HBP 1.0 code	HBP 2.0 code	Package price (INR)	ALOS
Acute meningo encephalitis / aseptic meningitis / febrile encephalopathy / hypertensive encephalopathy / metabolic encephalopathy / hepatic encephalopathy / brain abscess	Acute meningo encephalitis	M200048	MP005A	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days
	Aseptic meningitis	M200012	MP005B	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days
	Febrile encephalopathy	M200027	MP005C	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days
	Hypertensive encephalopathy	M200097	MP005D	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days
	Metabolic encephalopathy	M200058	MP005E	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days
	Hepatic encephalopathy	M200094	MP005F	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days
	Brain Abscess	New Package	MP005G	General Ward- 1800/- HDU – 2700/- ICU without ventilator– 3600/- ICU with Ventilator– 4500/-	7-14 days



Minimum qualification of the treating doctor:

Essential: MBBS

Desirable: MD/DNB/DCH/Equivalent (Pediatrics), MD/DNB/Equivalent (General Medicine), DM/DNB/Equivalent (Neurology), Neurosurgical referral if required

Special empanelment criteria/linkage to empanelment module: None

Disclaimer:

For monitoring and administering the claim management process for **Acute meningo encephalitis / aseptic meningitis / febrile encephalopathy / hypertensive encephalopathy / metabolic encephalopathy / hepatic encephalopathy / brain abscess** 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 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 any other relevant material as per the extant professional norms.

PART I: GUIDELINES FOR CLINICAL 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:

Meningitis is an inflammation of thin membrane of brain and spinal cord. Most common in children caused by viral or bacterial infection and moves into cerebral spinal fluid. Also caused by parasite or fungus usually from respiratory tract.

Causes:

- Viral
- Bacterial
- Parasitic
- Non-Infectious, Aseptic

Common clinical presentation:

Acute Meningo Encephalitis



- Altered state of consciousness i.e. encephalopathy (headache, neurological signs and fever)
- Lethargy or obtundation
- Coma- 20%, seizure -20%
- Defined syndrome of otitis and upper respiratory tract infection (common in children)

Aseptic meningitis

- Headache, neck stiffness, nausea
- Photophobia (classic symptoms)

Febrile encephalopathy

- Acute onset of fever, confusion, disorientation,
- Coma, inability to talk

Hypertensive encephalopathy

- Focal neurological defects & seizures
- Irritability and altered mental status due to cerebrovascular spasm.
- Visual disturbances

Metabolic encephalopathy

- Pneumonia, purpuric rash

Hepatic encephalopathy

- F/o liver cell failure like flapping tremor or fetor hepaticus
- Psychiatric variance of varying degree

Examination:

- Kerning's Sign (when is flexed at hip and knee at 90 degree)
- Brudzinski Sign (severe neck stiffness causes patient's hip & knee flex when neck is flexed)
- Rash on lower limbs

Investigation:

- Electroencephalography
- Lumbar Puncture
- Blood Culture
- Brain Biopsy
- CT/MRI



Management:

- Supportive therapy
- IV antibiotics
- Steroids
- Prophylactic antiepileptics

BRAIN ABSCESS

Brain abscess is collection of pus enclosed in brain tissue caused by bacterial or fungal infection. It can be caused by inflammation and collection of infected material coming out of

- **Local source** (ear infection, dental abscess, infection of paranasal sinuses, infection of mastoid air cells of temporal bone, epidural abscess)
- Remote source (infection in lung, heart, kidney)

Causes:

Anyone can get brain abscess, but certain group of people are at higher risk such as:

- Compromised immune system
- Cancer and other chronic illness
- Congenital heart disease
- Major head injury or skull injury

Symptoms:

Symptoms develop slowly and over a period of 2 weeks or they may develop suddenly

- Confusion, Drowsiness, inattention, irritability,
- Eventual coma, seizure, loss of speech/muscle function, stiff neck, vomiting
- Decreased movement, speech, sensation.
- Fever & chills, headache

Examination:

- Classic triad of headache, fever, focal neurologic deficit is rarely seen in (5-20% of cases in case series)
- Incidence of Negative culture: 25%-30%.
- Sudden worsening of preexisting headache accompanied with meningismus may be indicative of catastrophic event.



Investigation:

- Blood investigation CBC
- FNAC/ Brain Biopsy
- X-ray skull
- Head CT or MRI head or
- Electroencephalogram (EEG)
- Blood Culture

Management:

- Supportive therapy
- IV antibiotics
- Prophylactic antiepileptics
- Neurosurgical intervention
- Intracranial pressure (ICP) reduction maneuvers

1.3 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 meningo encephalitis	Aseptic meningitis	Febrile encephalopathy	Hypertensive encephalopathy	Metabolic encephalopathy	Hepatic encephalopathy	Brain Abscess
i. At the time of Pre-authorization							
Clinical notes including history, evaluation findings, vital monitoring, and planned line of management	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lumbar Puncture	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Blood culture	Optional	Yes	Yes	Optional	Optional	Optional	Yes

Complete blood count	Yes						
CT/MRI scan	Yes						
Electroencephalogram (EEG)	--	--	--	--	--	--	Yes
2D ECHO	--	--	--	--	--	--	Yes
Optional (Based on suspected etiology) Viral serology markers Liver function tests Metabolic panel Chest X-ray USG abdomen	Yes						
ii. At the time of claim submission							
Detailed Indoor case papers (ICPs) (including any cross-specialty referral that has been done)	Yes						
Lumbar puncture/Blood culture	Optional						
Investigation reports (if required)	Yes						
Detailed 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. Did the patient complaint of nausea, lethargy, seizures or focal neurological dysfunction? Yes
- II. Did the imaging \pm investigations confirm the diagnosis of encephalopathy/brain abscess?

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

References

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2. Venkatesan A, Geocadin RG. Diagnosis and management of acute encephalitis: A practical approach. *Neurol Clin Pract*. 2014;4(3):206-215. doi:10.1212/CPJ.0000000000000036
3. Ford-Jones EL, Macgregor D, Richardson S, Jamieson F, Blaser S, Artsob H. Acute childhood encephalitis and meningoencephalitis: Diagnosis and management. *Paediatr Child Health*. 1998;3(1):33-40. doi:10.1093/pch/3.1.33
4. Pediatric aseptic meningitis: <https://emedicine.medscape.com/article/972179-overview>
5. Weinberg, G. A. (2018). *Brain Abscess*. *Pediatrics in Review*, 39(5), 270–272. doi:10.1542/pir.2017-0147
6. Krzysztofiak, Andrzej & Zangari, Paola & Luca, Maia & Villani, Alberto. (2017). Brain Abscesses: An Overview in Children. *Journal of Pediatric Infectious Diseases*. 14. 10.1055/s-0037-1615786.