anti-F Mab) against Hendra and Nipah have been shown since 2009 to be highly effective for post-exposure protection on experimental animal. Its use in emergency setting is subject to approval of DCG(I).

4.5.7. Vaccine:

There is currently no approved vaccine that protects against Nipah virus.

4.6. Differential diagnoses

- Dengue
- Japanese encephalitis (JE)
- cerebral malaria
- Scrap typhus
- bacterial meningitis
- herpes simplex encephalitis
- other viral encephalitis

5. Discharge Policy

Nipah confirmed patients should be discharged only after full recovery and the RT-PCR test is negative on the throat swab/ blood sample. However, on discharge, patient is advised to remain in isolation at home till 21 days after the date of positive test. This shall be monitored by the community surveillance team.

Suspected cases kept under isolation must not be discharged before confirmation of negative result.

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Annexure-I

Sample Collection, packaging and Transport Guidelines:

Nipah virus being a BSL-4 agent, universal, standard droplet and bio-containment precautions should be followed during contact with excretions, secretions and body fluids of suspected patient. Adequate biosafety precautions should be adopted during collection/transport/ storage/ processing of suspected sample.

Sample collection: The samples should be collected as early as possible (preferably within 4 days) with all biosafety precautions and accompanied with detailed history of patients on the performa which can be obtained from the testing laboratory (Presently National Institute of Virology Pune in public sector is the testing laboratory which is diagnosing Nipah virus infection based on molecular detection of viral RNA and antibody detection by ELISA).

During sample collection wear complete disposable Personal Protective Equipments (N 95 mask, double surgical gloves, gowns, goggles etc). Wash hands with soap and water atleast for 30 seconds and then clean hand using 1-2 ml alcohol based hand sanitizer before and after collection of samples

The samples may be as follows

- Throat swab in viral transport medium
- Urine 10 ml in universal sterile container
- Blood in plain vial (atleast 5ml)
- CSF (atleast 1 ml) in sterile container

Transportation and Storage of samples: Samples should be safely packed in triple container packing and should be transported under cold chain (2-6°C) to the testing laboratory with prior intimation. Before dispatching the sample disinfect the outer surface of container using 1:100 dilution of bleach or 5% Lysol solution.

Sample containing vials should be kept in good quality plastic bags tide with rubber bands so that inside material if leaks should not come out of bag. The plastic bag should be kept in another container which should be sealed with adhesive tape. This carrier should be placed in another plastic bag sealed with rubber bands and placed in thermocol/vaccine carrier containing ice. The case

sheets with complete information should be placed in plastic bag and should be pasted outside the container.

Samples should be transported at 2-6°C if they arrive at the laboratory with 48 hours; if shipping time is expected more than 48 hours, the samples should be sent using dry ice. Samples should not be held at -20°C for long periods. The sample must be stored at – 70°C if storage is required for longer period.

Annexure-II

Surveillance Case Definition

Suspect Nipah Case

Person from a community affected by a Nipah outbreak who has:

- Fever with new onset of altered mental status or seizure and/or
- Fever with headache and/or
- Fever with Cough or shortness of breath

Probable Nipah Case

Suspect case-patient/s who resided in the same village where confirmed case-patient/s were living during the outbreak period and who died before complete diagnostic specimens could be collected.
OR
Suspect case-patients who came in direct contact with confirmed case-patients in a hospital setting during the outbreak period and who died before complete diagnostic specimens could be collected.

Confirmed Nipah Case

Suspected case who has laboratory confirmation of Nipah virus infection either by:

- Nipah virus RNA identified by PCR from respiratory secretions, urine, or cerebrospinal fluid.
- Isolation of Nipah virus from respiratory secretions, urine or cerebrospinal fluid.

Definition of a Contact:

A Close contact is defined as a patient or a person who came in contact with a Nipah case (confirmed or probable cases) in at least one of the following ways.

- has slept in the same household as a case
- has had direct physical contact with the case (alive or dead) during the illness

- has had direct physical contact with the (deceased) case at a funeral or during burial preparation rituals
- has touched the blood or body fluids (saliva, urine, sputum etc.) of a case during their illness
- has touched the clothes or linens of a case

Annexure-III

Protocol for the ventilator management of patient with Acute Lung Injury (ALI) /ARDS

Indications for Mechanical Ventilation:

Severe Respiratory Failure:Failure to achieve oxygen saturation of > or equal to 90% (or pO2 of > or equal to 60 mm Hg) on an FIO2 < 0.6.

Ventilator Settings:

Pressure pre-set (controlled)Low tidal volume ventilator support.
Tidal volume — 6 ml/kg ideal body weight (Respiratory rate to a maximum of 30-35 per minute).
Open lung strategy of ventilation with PEEP titration to keep the lung recruited to achieve an FIO2 of < 0.5 and a saturation of > 90% or a PaO2 of > 60 mmHg.
Additional use of recruitment manoeuvre is mandatory to ensure prevention of ventilator induced lung injury due to repeated opening and closing shearing injury.
Plateau (Pause) pressure not to exceed of > 30-35 mmHg.
Alternative modes of ventilation APRV (Airway Pressure Release Ventilation), IRV (Inverse Ratio Ventilation) in patients with persistent Hypoxemia (SpO2 of < 88-90% with high PEEP & FIO2 > 0.8).
Rescue therapy — Prone position ventilation, permissive hypercapnia or high frequency ventilation can be considered if above oxygen goals are not met.

If Non Invasive Ventilation for respiratory support is to be considered, it is mandatory to use non-rebreathing mask with use of inspiratory and expiratory tubes through critical care ventilators to reduce spread of infectious aerosols.Use of HEPA filters on expiratory ports of the ventilator circuit / high flow oxygen masks is recommended.