12.2.2 CHANGE OF EXTERNAL VENTRICULAR DRAINAGE SET

Aim

To change external ventricular drainage set without contamination of the apparatus

Key points

1. This document must be utilised in conjunction with PNPM 12.2.1 Care of the Patient having External Drainage of Cerebrospinal Fluid.
2. This procedure is an aseptic non touch technique. Refer to A&NTT Framework.
3. Inspect extension set ports for the presence of vented cap(s) prior to connection to the child. Replace vented caps on unused ports with nonvented caps. Refer to PNPM 2.3.2 Peripheral Intravenous (PIV) Access – Principles and Management.
4. The drainage set is changed up to every 7 days or as ordered by the neurosurgeon.
5. The drainage bag is changed when ¾ full[1] using a non touch technique

Equipment

70% Alcohol (for decontaminating trolley)
Dressing trolley
Dressing pack
Sterile gloves
10mL luer lock syringe & 0.9% saline for priming
2% chlorhexidine and 70% alcohol wipes
3-way tap
Needle free bung
Codman external drainage set
Laser light

PROCEDURE	ADDITIONAL INFORMATION
Perform hand hygiene. Decontaminate trolley with alcohol 70% prior to procedure set up. Open sterile equipment onto sterile field.	
Don gloves.	

PROCEDURE	ADDITIONAL INFORMATION
Assemble sterile external ventricular drainage tubing and 3-way tap. Attach a needle free bung to port on base of burette and/or three way tap Clamp the tubing on drainage set.	
Use alcohol wipes to disinfect existing external drainage tubing and 3-way taps in situ. Allow to dry.	
Close the 3-way tap closest to the insertion site Disconnect second 3-way tap and existing tubing.	
Connect the new tubing and the 3-way tap.	
Using a laser light, position the graduated chamber at the prescribed height in relation to the Foramen of Monro. Refer to PNPM 12.2.1 Care of the Patient having External Drainage of Cerebrospinal Fluid.	The height of the chamber will determine the rate of the CSF drainage.
Attach drainage bag to a suitable support below the level of the patient.	
Open both 3-way taps to patient and slowly unclamp the connections. Check for leakage from tubing/connections. Observe for flow and drainage of CSF.	

Reference:

1. Great Ormond Street Hospital for Children. Clinical guideline – external ventricular drainage. 2009. Available from: http://www.ich.ucl.ac.uk/clinical_information/clinical_guidelines/cpg_guideline_00069. Accessed: 30 July 2010.

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Royal Children's Hospital, Melbourne. Clinical guidelines (hospital) – external ventricular drains and intracranial monitoring. Accessed 30th July 2010. Available from http://www.rch.org.au/rchcpg/index.cfm?doc_id=12860

Codman™ EDS3 External Ventricular Drainage System, Product Information available at http://www.depuy.com/sites/default/files/products/files/edspocketref_0.pdf?bcsi_scan_4612728BE7E7B4AB=0&bcsi_scan_filename=edspocketref_0.pdf