

PAEDIATRIC HOSPITAL LEVEL ESSENTIAL MEDICINES LIST
CHAPTER 6: NEPHROLOGICAL/UROLOGICAL DISORDERS
NEMLC 24 JUNE 2021

A: PREVIOUS RECOMMENDATIONS

MEDICINE AMENDMENTS

SECTION	MEDICINE	ADDED/DELETED/NOT ADDED
6.1 Post Streptococcal Glomerulonephritis	Morphine	Dose amended
6.3 Nephrotic Syndrome, hypovolaemia	Sodium Chloride 0.9% bolus	Dose amended
6.3 Nephrotic Syndrome, antibiotic prophylaxis	Phenoxymethylpenicillin	Deleted

B: AMENDMENTS FOLLOWING COMMENT

Section added:

Dysfunctional Bladder

An external comment was received indicating the negative impact of bladder dysfunction. The Paediatric Committee added a general section on bladder dysfunction outlining what it is, the diagnostic criteria, and general and supportive measures with links to key sections such as urinary tract infections.

The section was added as follows:

DYSFUNCTIONAL BLADDER	
N31	
DESCRIPTION	
Abnormalities of filling or emptying of the bladder, i.e. underactive or overactive bladder. Aetiology may be neurogenic, anatomical or functional.	
DIAGNOSTIC CRITERIA	
Clinical features include:	
» Daytime frequency	» Straining
» Incontinence	» Weak stream
» Urgency	» Dysuria
» Nocturia	» Holding manoeuvres
» Hesitancy	» Post-micturition dribbling
Conditions include:	
» Overactive bladder (OAB)	» Obstruction
» Voiding postponement	» Stress incontinence
» Underactive bladder	» Vaginal reflux
» Dysfunctional voiding	» Giggle incontinence

Common in co-morbid neurological and behavioural problems.

GENERAL AND SUPPORTIVE MEASURES

- » Screen for UTI. *See section 6.2 Urinary Tract Infections.*
- » May have concomitant constipation, bowel management is essential in management. *See Chapter 2: Alimentary Tract, section 2.2.2 Constipation/Faecal Loading.*
- » Intermittent catheterisation is necessary with large post void residual volumes. Check post void volume by catheterisation after voiding.
- » Symptomatic school-going children may develop anxiety. *See Chapter 14 Child and Adolescent Psychiatry, section 14.5 Anxiety Disorders.*

REFERRAL

All for assessment

PAEDIATRIC HOSPITAL LEVEL ESSENTIAL MEDICINES LIST
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NEMLC 26 SEPTEMBER 2019

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6.3 Nephrotic Syndrome, antibiotic prophylaxis	Phenoxymethylpenicillin	Added

6.1 Post Streptococcal Glomerulonephritis

Morphine: Dose amended

An external comment was received indicating that 0.1mg/kg was too high for an intravenous dose. It was proposed that the dose be aligned with the South African Medicines Formulary (SAMF), with doses specified for different age groups. The Paediatric Committee agreed with this recommendation.

The text was amended as follows:

See fluid management in general and supportive measures.

- ~~Morphine, IV, 0.1mg/kg/dose~~
 - ~~Repeat after 4 hours if required.~~
- Morphine, IV, repeat after 4 hours if required.
 - < 6 months of age: 0.025 to 0.1 mg/kg/dose
 - ≥ 6 months of age: 0.05 to 0.2 mg/kg/dose

LOE: III¹

6.3 Nephrotic Syndrome

Sodium Chloride 0.9%: Dose amended

Phenoxymethylpenicillin: Deleted for prophylaxis

Phenoxymethylpenicillin: Added for treatment

Hypovolaemia in nephrotic syndrome

At the May Paediatric meeting the Committee proposed that the evidence for using sodium chloride 0.9% in hypovolaemia at either 10mL/kg over 20-30 minutes or 20 mL/kg over 10 minutes, as indicated in the text. It was outlined that the data for this recommendation is all in the setting of shock. The only data

indicating that smaller volumes over a longer duration should be used is from the FEAST trial.¹ The Committee recommended that the smaller volumes would be the safer option. The Committee noted that it should be clarified in the text that this is only in the setting of shock.

Antibiotics in nephrotic syndrome

At the May Paediatric Meeting, the Committee recommended that the evidence for antibiotic prophylaxis in patients with anasarca at risk of spontaneous pneumococcal peritonitis be evaluated. It was reported that there is no evidence that the use of prophylactic antibiotics is beneficial. It was outlined that if there is peritonitis then this must be treated.

Antibiotics

For patients with anasarca who have an increased risk for spontaneous pneumococcal peritonitis, there is no evidence that prophylactic antibiotics are beneficial.

For pneumococcal peritonitis treatment:

- ~~Phenoxymethylpenicillin, oral, 125–250 mg, 12 hourly.~~
- Phenoxymethylpenicillin, oral, 7.5-15 mg/kg, 6 hourly.

LOE

¹South African Medicines Formulary (SAMF), 12th Edition. Division of Pharmacology, Faculty of Health Sciences, University of Cape Town. 2016.

¹ Maitland K, et.al. Mortality after fluid bolus in African Children with severe infection. NEJM. 2011, 364 (26): 2483 – 2495.