Cystic Fibrosis Hospital admission summary

Children's Hospital for Wales



Bwrdd Iechyd Prifysgol Caerdydd a'r Fro Cardiff and Vale University Health Board

Date of admission Date of discharge Duration of admission consultant week:

Patient sticker

	Pre admission	Day 1	Day 7	Day 14
weight				
FEV1 (%)	()			
FVC (%)	()			
microbiology				

	Day 2	Next Tues/Fri Day	Next Tues/Fri Day	Next Tues/Fri Day	Next Tues/Fri Day	
Tobramycin levels						

Routine tobramycin levels should be taken Tuesdays and Fridays 18 hours after last dose (before 3pm weekdays; before 10am at weekends if necessary)

÷

Tick a	appropriate boxes	Comments and results
	IV antibiotic treatment received. Which? long line / portacath / cannulas Short course steroids New treatment(s) started IgE CRP previous high Tobramycin dose / poor renal function Cough swab Induced sputum Overnight oxygen trace Glucose profiling (age >5)	
consider	Diabetes team review CXR Bronchoscopy CT Annual review bloods / faecal elastase Liver ultrasound DEXA scan Psychology referral Research study. Which?	CF_Spit, CF-START

Patients with Cystic Fibrosis are usually admitted for intravenous antibiotics on Ocean Ward (those <2 years of age) or Land Ward (those >2 years of age). Patients who are known to isolate Burkholderia Cepacia are admitted to South Ward. If in doubt check with either the CF Nurse Specialists or the Consultant.

- The patient should be clerked fully by the respiratory team junior staff. There is no proforma
- Inform the Dietetic and Physiotherapy teams of the patient admission.
- The nursing staff on the ward will usually insert the gripper needle for patients with a portacath in situ
- Patients without a portacath in situ should have a long line inserted by an experienced Specialist Registrar.

Baseline investigations on admission

- Weight (this must be plotted on the existing growth chart)
- Cough swab send for MCS (CF lab protocol), fungal and AFB (may have already been done for patients admitted from clinic)
- Spirometry (note: this may have already been done for patients admitted directly from clinic)
- If FEV₁ is <70%, arrange overnight saturation trace in air with ward nursing staff
- Pre-meal glucose profiling for the first 24 hours of admission for all patients EXCEPT those under 5 years of age and those who are pancreatic sufficient.
- Blood tests on admission: U&E, creatinine, CRP and total IgE, HbA1C
- Blood tests should be documented on a flow sheet
- Weight / spirometry are measured and plotted twice weekly (Monday and Thursday before the ward round)
- The Admission Summary overleaf should be updated twice weekly before the ward round
- If a patient with Cystic Fibrosis loses their IV access during the night, do not attempt to resite a cannula. They can go without routine IV antibiotics overnight, and a long line can be sited the next day

First line intravenous antibiotics on admission

Ceftazidime

50 mg /kg three times a day with a maximum of 3g per dose.

Tobramycin

10 mg /kg as a single daily infusion over 30 minutes to a maximum of 660 mg.

U&E, creatinine must be taken AND CHECKED before the first dose of Tobramycin is given.

If the child is <1 month of age or has previously had high levels of Tobramycin use a dose of 7 mg / kg /day.

Tobramycin levels

These are taken on day 2, and on every Tuesday and Friday of the week thereafter. There is usually no need to take levels at the weekend.

- If the child is unwell, please discuss when to start tobramycin with the consultant as this may be delayed to allow for adequate hydration
- If the child is well, try to have the first dose of tobramycin given at approximately 4pm on the day of admission. U&E, creatinine must be TAKEN AND CHECKED before the first dose of tobramycin is given
- The first tobramycin level is measured 18 hours after the first dose, together with U&E, creatinine (10am)
- Thereafter tobramycin levels should be taken with U&E and creatinine every Tuesday and Friday morning until discharge.

Interpreting Tobramycin levels

- If 18 hour tobramycin level is <1.0mg/l then continue current dose.
- If 18 hour tobramycin level is ≥1.0mg/l
 - Omit the dose
 - Repeat tobramycin level in a further 24 hours (10 am next day)
 - Tobramycin should only be restarted once levels are <1.0 mg/l
 - All future doses should be reduced by 20%.
- If the tobramycin level assay fails but U&E and creatinine taken at the same time are normal, the tobramycin dose may be given at the correct time, but a repeat level must be taken at 10am the next day. If this assay also fails, then the next tobramycin dose should be omitted.