BRONCHIOLITIS

The Pennine Acute Hospitals NHS
NHS Trust

Young child (typically <1year, but seen up to 2 years, peak age 6 months) presents with:

URTI - after 2-3 days progressing to:

- Poor feeding
- Increasing cough/vomiting
- Increased respiratory effort
- Exhaustion
- Apnoea (<4months)
- Sub costal, intercostal recessions, tracheal tug, head bobbing
- De-saturations
- wheeze
- mild pyrexia rarely >39 deg
- widespread fine crepitations
- hyper inflated chest
- tachypnoea

Does baby have any increased risk?

- Preterm or low birth weight
- Age < 3 months (**esp<6/52**)
- Chronic lung disease or pre - existing oxygen dependence
- Congenital heart disease
- Cystic fibrosis
- Severe immunodeficiency
- Pulmonary hypertension
- Adenovirus bronchiolitis
- Neuromuscular disorders

YES → Refer to paediatrics

if severe symptoms below

- Move to resus /HDU
- Seek senior help in ED

NO → Assess severity of illness

SYMPTOM	MILD	MODERATE	SEVERE
WORK OF BREATHING	Normal or mild subcostal recession	Raised respiratory and heart rates, intercostal recession, use of accessory muscles RR >60	As moderate + grunting, head bobbing, sub costal recession, tracheal tug or nasal flaring, recurrent apnoea with or without bradycardia RR >70
SPo2	>92% in air, including when sleeping	<92% in air	<92% in >50% O2
OXYGEN NEEDED	none	O2 to maintain SpO2 >92%	As above
FEEDING	normal	Less than usual but >50% of normal volume Clinical dehydration	Not interested or <50% of normal volume
BEHAVIOUR	normal	Some intermittent irritability	Altered consciousness, fatigue, central cyanosis

YES

Discharge home with CCNT referral (if very well 72 hours CCNT open access)

Bronchiolitis advice leaflet

Advise parents:

- Feed small amounts often
- May need to return if signs of worsening, describe red flags
- Cough and wheeze may persist for several weeks for which no treatment is helpful
- Refrain from smoking
- Re-infection may occur
- 50% of children may wheeze with future URTI
- Consider social circumstances, distance from healthcare and skill & confidence of the carer

YES

Minimal handling

Infection control precautions

Maintain clear airway,

- suction only if necessary
- consider 0.9%saline drops if nasal blockage

O2 via nasal specs to maintain SpO2 92-96%

Reduce feeds/consider NGT 60-75% of normal 1-2 hourly

Consider nebulised 3% hypertonic saline x 4ml

Consider nebulised atrovent 125 to 250mcg or salbutamol 2.5mg if very wheezy, discontinue if no improvement

Monitor closely

If fever >38.5 consider septic screen

Refer to Paediatric O&A for longer period of observation

YES

Move to HDU/RESUS

Get ED senior help

Bleep Paeds Reg 4505

Maintain clear airway,

- suction only if necessary
- use 0.9%saline drops if nasally blocked

High flow O2 to maintain SpO2 92-96%

Insert OG/NG tube on free drainage

NBM - IV fluids, 2/3maintenance avoiding hypotonic fluids

Continuous monitoring

Capillary blood gas / U&E

Consider CPAP/ventilation (under paeds guidance)

If fever >38.5 consider septic screen

D/w NWTS

Notes:

- Clinically assess hydration status
- **Do not** routinely perform blood tests, including capillary gas (unless worsening condition)
- **Do not** routinely perform a chest x ray
- **Do not routinely use:** antibiotics, hypertonic saline, adrenaline (nebulised), salbutamol, montelukast, ipratroprium bromide, systemic or inhaled corticteroids (or any combination of nebulised drugs)
- **Do not** routinely perform nasal suction (consider if respiratory distress of feeding difficulties due to upper airway secretions, use suction if apnoeic regardless of secretions)

For further guidance see Bedside Partnership Guidelines on Intranet or **NICE Guidance 9 Bronchiolitis in children**; diagnosis & management (2015), or refer to NWTS (guideline)