

# Medical management of hyper-cyanotic spells in Tetralogy of Fallots

## STEP 1

Always assess using ABCDE approach  
Spells Can be mild, treat according to response as follows

## STEP 2 - Position Knee to chest

Call for help  
Place baby in the knee to chest position either supine or over parent's shoulder  
(This calms the infant, increases systemic venous return and increases systemic vascular resistance)

## STEP 3 - Oxygen

Administer 100% oxygen via non re-breathing mask.  
Monitor oxygen saturations and ECG

## STEP 4 - If no response to above

If stable, give oral morphine 0.1mg/kg  
Site IV cannula – check blood gas  
Give IV 0.9% sodium chloride 20mls/kg in aliquots of 10mls/kg  
Give IV morphine 0.1mg/Kg as a bolus (can be repeated)  
Use IM or subcutaneous route if IV access not readily available.  
Monitor neurological and respiratory status as morphine has respiratory depressant effects

## STEP 5 - If no response to above

Give IV Propranolol 0.1mg/kg as a bolus  
Monitor for bradycardia



## DETERIORATION

Contact SORT/ cardiology team  
Phenylephrine, 0.02 mg/Kg IV (used to increase SVR)  
IV Esmolol infusion may be another alternative before ventilating the baby as a last resort

## Symptoms & Triggers

may appear pale, grey or blue  
maybe 'clammy'  
tachypnoea  
deepening of cyanosis  
decreased intensity of heart murmur  
loss of consciousness

distress  
crying  
defecation or straining  
dehydration  
fever  
tachypnoea  
anaesthetic agents  
cardiac catheterisation

## Useful Contacts

Contact SORT (Southampton Oxford retrieval team) for 24 hour advice on 02380 775502

Contact 02380 777222  
Bleep 2811 On call Paediatric cardiology registrar for advice