So now, you have a patient with an established airway, ventilating satisfactorily, and fluids are running into both arms. Next steps:

EVALUATION OF RESPONSE

all the signs of shock should start to go away; but this is not very sensitive.

- **URINE OUTPUT: the best monitor of organ perfusion**
  - **For adults, you should get 0.5ml/kg/hr, or around 35-40ml/hr for a 70kg man**
  - **For kids, its 1ml/kg/hr**
- **If you have central access, CVP is probably better than urine output.**

- **ACID-BASE BALANCE:**
  - **Initially, the trauma patient will be alkalotic from hyperventilating.**
  - **Long-standing or severe shock may produce metabolic acidosis.**
  - **Base deficit and lactate are good markers of this.**
  - **They can also be used to monitor improvement; the base excess should get less negative, and the lactate should drop.**

Rapid response: a return to hemodynamic normality

- this means they probably lost 20% or less of their blood volume
- slow the fluids down to a maintenance rate, and get the surgeon
- get cross-matched blood for these patients.

Transient response: perfusion indices improve, and then deteriorate again

- this means they probably lost 20-40% of their blood volume
- CONTINUE the fluids at their original rate
- ALSO GET TYPE-MATCHED BLOOD- transfusion is needed
- They are clearly still bleeding. Get the surgeon.

No response:

- the patient is clearly exsanguinating
- **immediate definitive management is needed**
- consider non-hemorrhagic causes of shock at this stage (did you miss a tamponade or tension pneumothorax?)

MODIFY RESUSCITATION ACCORDING TO THE RESPONSE

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