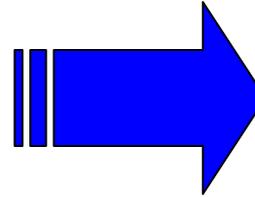


BVS MONITORING

PURPOSE OF USING BVS (Blood Volume Sensing)

1. To help identify the patient's IBW
2. To identify how much fluid can be removed safely without causing adverse effects
3. To help determine a patient's individual **refill rate**
4. To help avoid episodes of hypotension, leading to dizziness, nausea, vomiting, etc
5. To help understand how a patient's medical history can effect fluid removal



HOW TO USE BVS MONITORING:

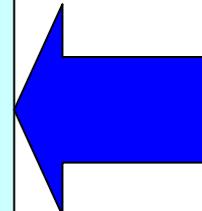
SET UP:

1. Turn machine on and allow FCH to be completed
2. Line machine with BVS lines
3. Do not have BVS curvette in BVS sensor during FCH – if machine already lined remove curvette and blood pump segment until FCH is complete, then replace
4. Press BVS and choose 'on'
5. Prime machine



WHILE BVS IS IN PROGRESS:

1. Choose to do half hourly or hourly checks
2. Note BVS reading and take patient's BP
3. Note down what the patient is actually doing and feeling at the time, eg lying down, sitting up, legs elevated, legs down, eating, drinking – ie, any changes which may affect BP and refill rate
4. **If adverse effects (dizziness, nausea, vomiting, etc) begin manage appropriately and note down BVS reading**
5. On the next BVS session, the new alarm limit would be set above this reading so as to avoid the adverse effects
6. If no adverse effects are noted, the alarm limit could be set at a higher level and the UF increased in stages to see if this can be tolerated
7. **Remember:**
REFILL RATE should be GREATER THAN or EQUAL to UF RATE



SETTING PARAMETERS:

1. Press BVS and choose graph – BVS only
2. Remember, at the beginning of the session, the patient's individual
Blood viscosity = 0% on the graph
3. Fill out BVS record sheet with patient's data, IBW, UF, etc
4. **Set patient's alarm limit:**
 - Start with 8 to 10% (be conservative)
 - When the blood viscosity is 8 to 10% thicker, due to fluid removal, machine will alarm
 - If the alarm limit is reached, assess whether any adverse effects are pending, eg low BP, dizziness, nausea, etc
 - Depending on outcomes, the alarm limit can be re-set to a lower or higher level, for the next BVS session
 - The individual's alarm limit can only be identified with trial and error