Fick CO Calculation

1. The FICK calculation requires, HR, Hgb, O2 Consumption, Arterial Sat., and Venous Sat. Predicted O2 consumption < 20yrs of age:

   \[ O_2 \text{cons.} = 1.39 \times \text{Height (cm)} + 0.84 \times \text{Weight (kg)} - 35.7 \]

2. O2 Consumption is calculated using patient Age, Sex, Height and Weight. O2 consumption Males > 20yrs of age:

   \[ O_2 \text{cons.} = \text{BSA} \times (138.1 - 11.49 \times e_{\log(\text{age})} + 0.378 \times \text{HR}) \]

3. If no predicted O2 consumption is calculated, make sure height and weight are entered in the patient browser. O2 consumption Females > 20yrs of age:

   \[ O_2 \text{cons.} = \text{BSA} \times (138.1 - 17.04 \times e_{\log(\text{age})} + 0.378 \times \text{HR}) \]

4. Select Patient>Browser next select patient folder, on the menu bar select Edit>Correct and enter the missing height and weight. FICK CO formula no shunt detected:

   \[ \text{CO (Flick)} = \frac{O_2 \text{consumption}}{A \cdot V_{O_2} \text{ diff.} \times 10} \]

5. At the same time check for the correct Date of Birth. An emergent registration enters a default Date of Birth = 1850. Select – OK

6. Return to the FICK menu and select the choice for Predicted O2 consumption.