Renal Vignettes - acid base balance

Primary Respiratory Acidosis

HUMAN vignettes are brief, highly targeted exercises aimed at reinforcing single basic physiological points. A fuller more open ended exercise in acid-base balance can be found in the Acid-Base Balance exercise link on this same page.

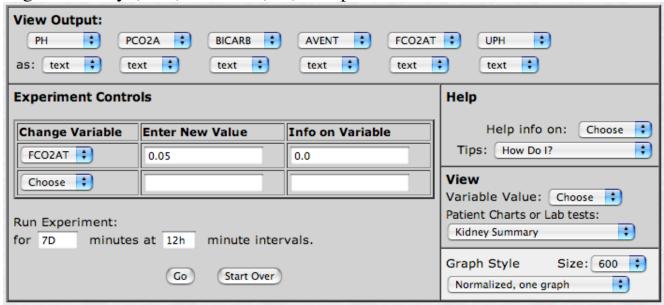
A respiratory acidosis may be induced in HUMAN by controlling atmospheric % CO2 inspired as follows:

a) Set tables under view Output: for acid-base output (and possible use in plotting on a Davenport diagram)

PH, PCO2A, BICARB, AVENT, FCO2AT, UPH (note: look each of these up in Help info on:) In Patient Charts .. on each run ask for a Kidney Summary.

Now execute a baseline run running for 0 min. w/ 0 min. between printouts.

- b) Increase the level of atmospheric % CO2 (note: look FCO2AT up in Help info on:)
- 1) Use FCO2AT = 0.05 (the normal level is, of course, 0).
- c) run for 7D (days) at 12H (hour) intervals.
- d) Characterize acid-base status at 0, 12H & 7D (by a Davenport plot if appropriate), identify the primary acid base problem and characterize the degree of early (12H) and late (7D) compensation.



Initial setup - 2nd screen