Garcia, Ana Lab 14- Respiratory Physiology 14 November 2023

Purpose

The purpose of this was to give us a better understanding on what spirometry is, and show us in depth lung capacities of tidal volume, vital capacity, inspiratory capacity and reserve volume, expiratory capacity, etc.

We were also introduced to the use and theory behind inspiratory devices and a portable spirometer. The basics of inspiration were also covered and we were shown how they will be used in real life situation, such as in patients that undergo open heart surgery, or who remain bed-ridden for long periods.

Procedures

14-D: Incentive inspiratory devices

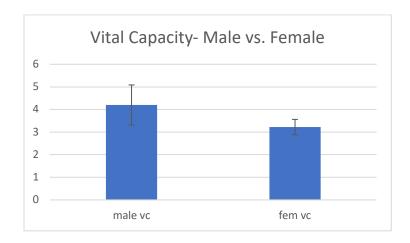
Procedure

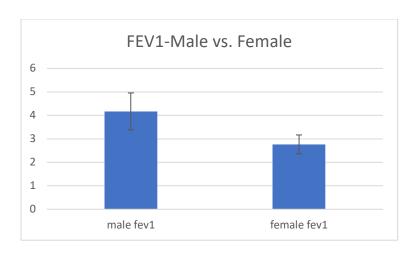
1. Obtain an incentive device and attach your disposable cardboard mouthpiece and white

(or blue) filter to the breathing tube. The filter is quite a bit bigger than the breathing tube, so use your hand to try to get the best seal possible, it is not crucial to have a complete seal.

- 2. Breathe in as deeply as possible and record the measurement given on the device. Depending upon the model, you may have to move colored balls up plastic columns or move a bellows within a column.
- 3. Record your values. Discard the disposable cardboard mouthpiece and place the filter in the correct tub after use (the tub is labeled).

Results





Discussion

Before doing this lab, I had no idea what a spirometer was or how it was used but now I'm more familiar with it. I am unhappy with my results of only a 2.7 because I really thought my lung capacity was way better than that since I'm always the fastest blowing-balloon person I know when it comes to party decoration. I'm not sure if it has anything to do with being able to whistle but maybe my low score explains why I can't do it.

Conclusion

- Know the normal values for physiochemical tests performed during a urinalysis.
- Know the clinical significance of abnormal readings any physiochemical tests performed during a urinalysis.
- Understand the role of hormones in water and electrolyte balance.
- Understand the significance of specific gravity and salt concentration of the urine.