

## **Henke's Med Math turnin #3: Part two of case study:**

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1) Many of these will stress the heart and kidneys, and the client already has compromise to both of these organs. This needs to be considered. Also, if the patient is already experiencing significant hypotension and warfarin, the use of aspirin may be superfluous and only adds a bleeding risk + a strain on the kidney. If something had to be cut altogether, this seems aspirin would be the most likely as we have other means to thin the client's blood, and while the client is sedated and afebrile this medication is not contributing pain control or antipyretic uses.

2) The client is currently under sedation due to being mechanically ventilated. Propofol would have hypotension generating effect, and the client is already hypotensive at this time. As such, they are likely utilizing two vasopressors just to keep the clients BP from bottoming out altogether.

3) As stated before, the client is mechanically ventilated, which is commonly complimented by use of a sedative to keep the client from the uncomfortable reality that this arrangement engenders and prevent complications of the client fighting the machine currently breathing for them.

4) Digoxin is likely the medication she is taking to control her atrial fibrillation (AFIB). However, in the presence of chronic kidney disease (CKD), with all the medications she is currently on and going to likely be taking while in intensive care, this may no longer be appropriate due to potential for digoxin toxicity further complicating her critical condition.

5) 3 theories of the case here: 1) with low blood pressure, her heart is compensating by increasing rate to try and restabilize her BP. 2) she is on several vasopressors which are ramping up heart rate in response. 3) it may be an unreliable heart rate due to the impact AFIB has on telemonitoring.

6) Some medications utilize slow push times to prevent significant reactions from the body. This can be a sudden drop in blood pressure or even vomiting. Given that our client is already very hypotensive, and it would appear there is difficulty getting the client's BP back to a healthier range – as well as the client being on a ventilator at this time – vomiting or a sudden drop in BP would be absolutely catastrophic to her care and stability. As such, push times should be considered for the associated meds that require them, and adhered to strictly.