

Intermediate Regulatory mechanisms

- Act within few min to few hours
- Remain functional from few days to a month only
- corrections are done primarily by altering the blood volume

1) stress Relaxation mechanism

Rise in arterial BP (eg: following massive slow in transfusion)



vessels become stretched



causes Relaxn of BVs by Vascular tone adjustment



causes increase in capacity of arterial system



concomitant fall in BP

2) Reverse stress Relaxation mechanism

Fall in arterial BP (eg: following prolonged slow bleeding)



less stress on vessel wall



causes tightening of BV walls by vascular tone adjustment



Restores BP back to normal

3) Capillary fluid shift mechanism

- when BP is raised $\rightarrow$ mean capillary pressure $\uparrow$ ses $\rightarrow$ shift of fluid from circulation of ^{to} ISF compartments $\rightarrow$ Reduces blood volume $\rightarrow$ Restores BP
- when BP is lowered $\rightarrow$ mean capillary pressure $\downarrow$ ses $\rightarrow$ absorption of fluid from interstitium to circulation $\rightarrow$ Blood vol increases $\rightarrow$ Restores BP
- This mechanism is 2 tones more effective than baroreceptor reflex but it begins to act much slowly.

