Factors related to the patient

1. Route of administration:.

I.V: Intravenous

Why is it higher than anything inside the vein because it reaches directly to the major blood circulation

As for inhalation, because of the large surface area based on the point 2

I.M: Intramuscular

S.C: subcutaneous

Topical like ointment, gel, and sticky

2.Absorbing surface: ..

The greater the surface area exposed to the reaction, the faster the reaction, the greater the number of receptors that absorb the drug

Vascularity :(blood supply) امداد دموي

The more the absorption increases and the less it decreases .

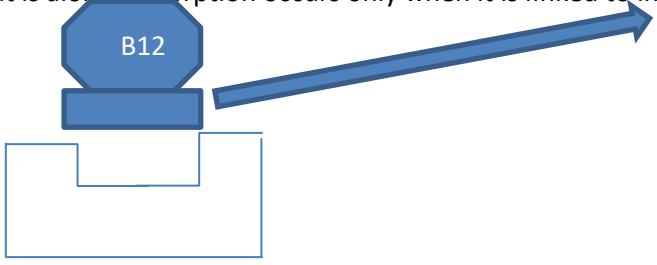
3. Systemic circulation

H.F: Heart failure

Shock: the absence of the system circle in the peripheral ليست بمعنى صدمه

4.Specific factors:

B12 when it is alone, absorption occurs only when it is linked to intrinsic factor .



B) Factor related to the drug

توضيح:الغشاء البلازمي عبارة عن رأس وذيل ولان الرأس hydrophilic لذا water-insoluble لا تستطيع العبور

Completely %100 water-insoluble =lipophilic

Ionization :

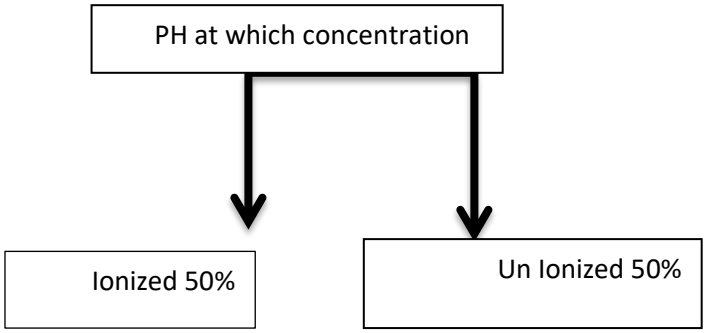
Non -ionized ⟹ lipophilic

ionized ⟹ hydrophilic-

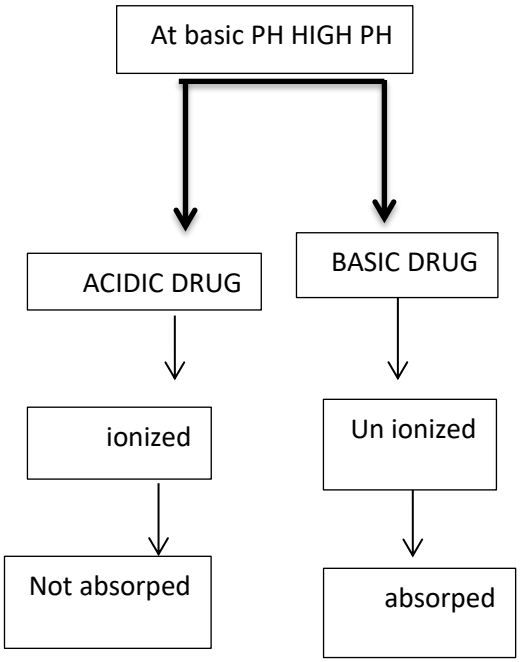
Acid < 7 < base/alkaline

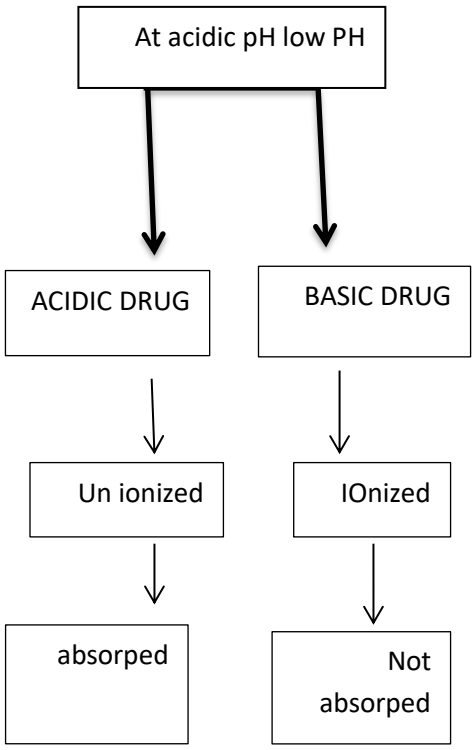
ثابت الاتزان= pka

pka تعريف -------- > PH at which concentration



at specificfor each drug -

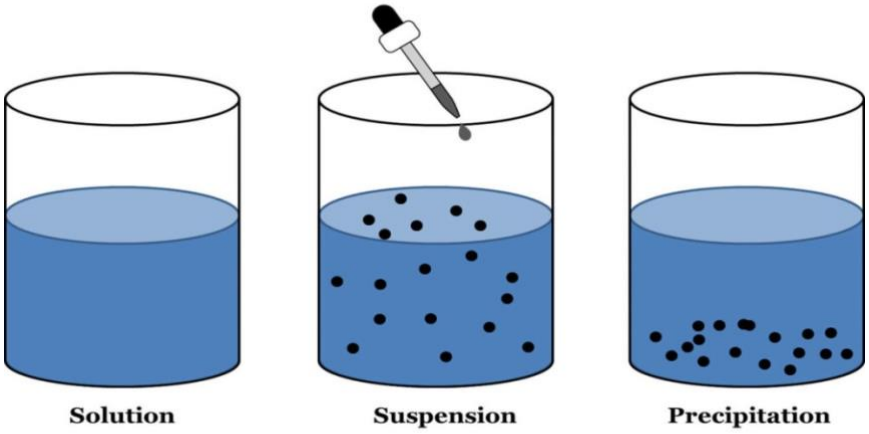




حمض في وسط قاعدي لا يمتص

- حمض في وسط حمضي يمتص
- قاعدة في وسط قاعدي تمتص
- قاعدة في وسط حمضي لا تمتص
- تغيير درجة الحموضة يغير معدل تأين الدواء وبالتالي امتصاصه
- اذا كانت درجة الحموضة يلي عندها 50%Ionized = 50%unionized اقل من 7 فالدواء حمضي اما اذا كانت اكبر من 7 فهو قاعدي

Suspension :powder +water (particle 1000nm)معلق



Done by :shahd shamaseen