

Pharmacology day 2

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Route of drug administration

- ▶ What is route of administration -the way or path by which drug moves and gives its pharmacological action .
- ▶ Selection of route depends on -
- ▶ Physical /chemical properties of drug -ex solid, liquid ,gas solubility ,Ph
- ▶ Site of desired action -localized or generalized.
- ▶ Route & extent of absorption of drug -bioavailability
- ▶ Metabolism of drug -first pass metabolism , by pass
- ▶ Rapidity of response
- ▶ Condition of patient -vomiting unconscious

PHARMACODYNAMICS

PHARMACOLOGY- PHARMACOLOGY MEANS ALL ABOUT STUDY OF DRUG
DRUG EFFECT ON A BODY AND BODY RESPONSE FOR DRUG

PHARMACOLOGY - PHARMACON +LOGOS = TO STUDY ABOUT THE DRUG
(DRUG) + (TO STUDY)

PHARMACODYNAMICS - WHAT DOES DRUG DO TO THE BODY

ASK YOURSELF - WHY YOU AR TAKING MEDICINES ?

WHAT HAPPENED WHEN YOU TAKE MEDICINES

EX - ANTIBIOTICS

DESIRABLE EFFECT - DIAGNOSIS ,PREVENTION, TREATMENT

UNDESIRABLE EFFECT- SIDE EFFECT (VOMITING), ADVERSE EFFECT
(RASHES)TOXIC EFFECTS(CANCER)

PHARMACOKINETICS

- ▶ WHAT DOES BODY DO THE DRUGS ?
- ▶ ASK YOURSELF - WHAT IF DRUG REMAIN AS SUCH IN BODY ?
- ▶ DRUG WILL DO- A ,D,M,E
- ▶ A ABSORB, D DISTIBUTION ,M METABOLISM (BIOTRANSFORMATION),E
ELEMINATION (URINE ,GAS,STOOL)
- ▶ This particular science determines what happens to a drug from the time it is administered through its circulation within the body and to the moment when it is ultimately eliminated from the body

Drug half life

- ▶ A drug half life is an important factor when its time to stop taking it . Both the strength and duration of medication will be considered, as well its half - life .

DIFFERENT SOURCES OF DRUG

- ▶ SOURCE - FROM WHERE WE GET DRUG (MEDICINES) -DIAGNOSIS,PREVENTION ,TREATMENT.
- ▶ SOURCE OF DRUG ;- ALL OF THOSE AGENT WHICH GIVES MEDICINAL VALUES CAN BE TREATED AS SOURCES OF DRUG .
- ▶ PLANT- FLOWER (VINCA) , FRUITS +SEEDS (NEEM) ,LEAF (EUCALYPTUS) . STEM (CINCHONA BARK),ROOT (SATAWALI),
- ▶ ANIMAL-PANCREAS (INSULIN) ,SHEEP (THYROID),CODLIVER OIL, BLOOD (VACCINE) ,STOMACH TISSUES (PEPSIN),URINE (HCG HORMONE) BONE (CALCIUM).
- ▶ MINERAL - IRON (ANEMIA), ZN (WOUND) , IODINE(ANTISEPTIC),GOLD (ARTHRITIS) ,SILVER (IMMUNITY) ,BOREX (ANTISEPTIC) ,SELENIUM (DANDRUFF) ,FLURINE (ANTICEPTIC) ,CHLORINE (DISINFECTANT)
- ▶ MICROBIAL - PENICILLINE, LACTOBASILUS , STREPTOMYCIN
- ▶ SYNTHETIC - EMETIN , BISMUTH IODIDE
- ▶ BIOTECH - RECOMBINENT DNA TECHNOLOGY