Oral Medicine sheet #5

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There are categories of drugs:

1-Prescription only medications: Drugs which may only be sold or supplied from a prescription by an appropriate practitioner.

2-Pharmacy drugs: Drugs that can be prescribed by the pharmacist himself.

3-General sale medicine: Drugs that the patient can buy without prescriptions.

Examples:Hydrocortisone cream is a prescription only medication. Aspirin is a general sale drug. Ibuprofen is a prescription only medication. Paracetamol is a pharmacy drug.

Controlled drugs are drugs which are liable to be misused and cause problems like addiction like opoids (morphine, ethidine)

Prescribe: to order in writing the supply of medicine to the patient.

Supply: to provide a medicine directly to a patient.

Prescription : an order in writing for dispensation of a medicine signed by a person qualified to prescribe and made to a professional who is legally authorized to dispense.

The prescription must be written clearly with: full patient name, date of birth, signature, address, full name of drug, dose, frequency. Avoid trade names, decimal points, latin.

The important things in prescription: name of patient, age, total number of days of treatment, generic name of the drug, instruction how to take the drug.

There are things we must know before we presicribe drugs:

1. Interactions
2. Children and elderly: the have more toxicity and side effect
3. Pregnant and breasfeeding: some drugs get secreted in the milk and affect the baby.
4. Renal and liver diseases: most drugs are metabolized in kidney or liver.

We must be cautious with patients who have one of these categories. The benefit must be higher than the risk to prescribe the drug safely.

Commonly used abbreviation: PRN (per needed) PO (orally) TDS (3 times per day) QDS (4 times per day)

Patients at particular risk:

Children: We should reduce the dose by age or body weight. Most children take syrup not tablets so we must be careful because syrup have sugar so if they use it for a long time they will be susceptible to caries and candida infection so it is better to use sugar free preparations.

Elderly people sometimes have exaggerated reactions to drugs. GI hermorhage is more common in elderly when we prescribe to them drugs like brufen. Interactions are more common because most elderly are taking medications for hypertension, diabetes or cholesterol so we must make sure that the drug we prescribe doesn’t interact with their medication.

Pregnancy: we only prescribe drug if it is absolutely essential because most drugs can have side effect on baby or the pregnant woman. It is dangerous to prescribe drugs in the first trimester because of teratogenic effect is highest.There is classification of drugs in terms of side effects on pregnancy:

1. : human studies with no side effect (safest to use)
2. : animal studies without side effect but no human studies
3. : animal studies with side effect but no human studies
4. : human studies with teratogenic effect

(X): animal and human studies with teratogenic effect

The best drug to prescribe is (A) but most drugs are (B) and (C) so prescription in pregnancy only if it is absolutely needed.

Some drugs get secreted in the milk and the baby take it in breastfeeding so sometimes we give antibiotic (amoxicillin) to the mother and the child gets allergy to penicillin with side effects.

Many drugs are metabolized in the liver so patient with liver disease are susceptible to these medications. Also the same with patients who have renal failure.

Last time we talked that NSAID interfere with production of cyclooxygenase and the most common NSAID is ibuprofen. Patients that have peptic ulcer are at particular risk from NSAID because it increases the risk of GI bleeding. Patient with bleeding disorders also contraindicated because NSAID have effect on enzymes in the platelet. Also patients that are taking anticoagulants and children under 12 are contraindicated especially aspirin for children under 12 because there is risk of hepatic encephalopathy (Reye’s syndrome). It also can cause bronchospasm in asthmatic patients and can cause bleeding in the the third trimester of pregnancy. It can also cause enhance bleeding in patients with liver or renal disease.

Paracetamol has similar analgesic effect to aspirin. It is antipyretic and doesn’t have anti inflammatory effect. It is the safest drug, it doesn’t have side effect on GI tract or reye’s syndrome in children. The maximum adult dose is 4 grams daily (8 tablets). After that there will be hepatic toxicity or liver failure.

Opoid use for dental pain is very limited and not very effective. It is used for pain in caner. The most important side effect is dependence and tolerance.

Antibiotics are either prophylactic or therapeutic. Prophylaxis against surgical site infection in most oral surgeries we don’t need prophylactic antibiotic excpect if the patient is immunocomprimised. Therapeutic indications for antibiotic: if the infection has systemic manifestations, facial space involvement, rapid spread of infection, inadequate drainage, immunocomprimised patient. These are important to know if the patient need antibiotic for treatment or can be treated without antibiotic.

The most common antibiotic is amoxicillin because it has broad spectrum and high window of safety. Also augmentin is commonly used(amoxicillin + clavulanic acid) the function of clavulanic acid is to inhibit the beta lactamase enzyme. Metronidazole is commonly used used for anaerobic infection. Clindamycin is used for patient with allergy to penicillin but it is more commonly reported to cause pseudomembranous colitis. 10% of patient with allergy to penicillin have cross sensitivity to cephalosporin. There are many generations of cephalosporin and the spectrum is the same as amoxicillin.

Antifungal drugs are commonly used as topical form but sometimes the patient is resistant to topical treatment or has sever candida infection or immunocomprimsed so we use systemic antifungal like miconazole or flocunazole.

Antiviral drugs are used to treat sever herpetic infections like primary herpetic gingivostomatitis which is common in children and self limited but if it was severe we use antiviral drugs.