

Firstly , the doctor wasn't very clear about the deleted slides ; when we find out exactly we will upload them on the group , so don't worry .

**** Set of slides #1 :-**

Slide #2 : - Local hormones : so they're released locally and work as hormones ; used to maintain homeostasis .

- They are not real hormones , but they're neurotransmitters .

Slide #3 : - Anaphylaxis is an immediate severe type of allergy ; penicillin can cause it and this is a medical emergency situation .

Slide #4 : - Histamine excess will be inactivated and excreted by the urine .

Slide #6 : - Not for memorization .

Slide #7 : - Satiety effect is the feeling you get when your stomach is full .

- Bronchioconstriction due to histamine is short in duration .

Slide #8 : - Physiological antagonism : meaning that a drug does opposite to physiological action of histamine ; while pharmacological antagonism : meaning a drug goes to the same site of histamine action to either inhibit histamine release or antagonize the receptor .

- Epinephrine is used in the treatment of anaphylaxis while is a life saving .

Slide #10 : - First generation is usually given to children so they sleep , while second generation is better for active adults .

Slide #11 : - H1 antagonists are not abused due to the dryness it produces

Slide #12-13 : - Deleted .

Slide #14 : - Menier's Syndrome is a disease of the inner ear .

Slide #15 : - Anticholinergic drugs produce 20% inhibition of gastric acid , others like placebo will produce 30% , H2 antagonists 40-60% and H⁺ pump inhibitor 100% .

Slide #19 : - Deleted .

Slide #22 : - Ideal anxiolytic drugs shouldn't be sedative thus Buspirone is an ideal drug .

- Don't memorize the receptors (also Slide #23) .

**** Set of slides #2 :-**

Slide #3-4-5 : - Not required .

Slide #11 : - In heart failure more angiotensin II will be produced .

Slide #18 : - Aliskiren will inhibit renin activity , while beta-blockers will inhibit renin release .

Slide #22 : - SH can bind to proteins , enzymes so will interfere with their activity .

Slide #30 : - Deleted .

Slide #31 : - Anti-nociceptive : inhibit pain sensation .

**** Set of slides #3 :-**

Slide #9 : - Pulsatile administration is difficult .

Slide #12 : - To treat infertility is by achieving a mature ovum .

- We can induce ovulation by drugs like FSH and LH .

Slide #20 : - The drug is continued until the age of 21 .

- The drug is expensive and we have to use it everyday .

Slide #23 : - Closure of epiphyseal plate will decide whether acromegaly or gigantism will occur

**** Set of slides #4 :-**

Slide #7 : - Increase of thyroxin will increase number of beta-adrenergic receptors .

Slide #12 : - Thyroid desiccated is not used nowadays , used to be extracted from animals thus causing allergy , although synthetic drugs can cause allergy as well !!!

Slide #17 : - Deleted .

Slide #20 : - When thyroxin is taken orally it's preferable to be on empty stomach + in the morning + monitoring TSH levels in the patients + monitoring clinical symptoms .

Slide #23 : - Agranulocytosis is the disappearance of granules from WBCs .

Slide #24 : - Thyroidectomy is the last choice for hyperthyroidism (we can cut 1/2 or 1/4 or 1/3 depending on the situation and severity of the hyperthyroidism .

Slide #26 : - Radioactive iodine will destroy tissues of the thyroid gland . It's a one shot treatment and better to isolate the patient for 1 week .

Slide #28 : - Deleted .

**** Set of slides #5 :-**

Slide #2 : - Calcium is important in the movement of : muscles , electrical signals , release of hormones and neurotransmitters .

Slide #14 : - Teriparatide is the last choice drug .

Slide #30 : - Fracture if happened it's considered as late stage .

Slide #32 : - Estrogen alone can cause uterine cancer (contradict physiology !!!) .

**** Set of slides #6 :-**

Slide #10 : - Spironolactone works as diuretics as well .

Slide #17 : - They're not anticancer agents although they're used to treat cancer .

Slide #18 : - Metyrapone If we gave the patient a dose then the urinary excretion of corticosteroid dropped .. this means that the problem is not in the adrenal cortex .

Slide #20 : - Fat re-distribution on other sites .

Slide #22 : - Nitric oxide reductase is important in inflammation of blood vessels .

Slide #24 : - Psychosis is due to chronic usage .

Slide #25 : - Available in many preparations with anti-bacterial or skin medicine .

Slide #27 : - Prednisolone is one of the most commonly used preparation .

- Triamcinolone + Beclomethasone are topical drugs .

Slide #28 : - Long acting drugs are parental drugs .

Slide #29 : - Status asthmaticus we use epinephrine in life saving situations .

Slide #30 : - In immunosuppression glucocorticoids are a must .

Slide #31 : - In replacement therapy we use glucocorticoid in small physiological doses (we expect no side effects) , but in other occasions e.g. anti-inflammatory , anti-allergic or immunosuppression activity we use them in high doses (called pharmacological doses) thus we expect complications .

- Regarding the first point : 1) after stopping the treatment immediately (not slowly) there will be hypo-aldosteronism (addison crisis) or when the treatment lasts more than 2 weeks .

2) to discontinue the treatment either stop the treatment slowly as If not the disorder symptoms will re-appear or will be exaggerated + withdrawal symptoms will appear (nausea , headache , weight lost , postural hypotension , vomiting , fever , joint and muscle pain) .

also when we discontinue the treatment add supplements at stress times (e.g. surgery , heat ,..etc) as we assume that pituitary and hypothalamus is suppressed so we increase the dose .

Slide #32 : - If cushing syndrome appeared to a patient but the medical treatment is vital , we as physician have to ignore the cushing syndrome .

Slide #33 : - Regarding third point we use 2/3 of the dose at morning and 1/3 in the evening to mimic the physiological rhyme which is important in replacement therapy .

**** Set of slides #7 :-**

Slide #3 : - Testosterone exhibit negative feedback inhibition on FSH but sometimes it's not enough so inhibin is produce to complement it .

Slide #4 : - 5-alpha reductase is present in prostate , seminiferous tubules and epididymis .

- 2-alpha-dihydrotestosterone is locally produced .

Slide #7 : - Virilizing effect would be a side effect in treatment especially in women and children (it can close the epiphyseal plate and cause short stature) .

- Virilizing effect is important in males while anabolic promoting effect (of protein) is important in both genders .

Slide #9 : - Breast cancer can be divided into estrogen related and non-estrogen related .

- High doses can inhibit spermatogenesis .

Slide #12 : - Liver cancer is a side effect of oral testosterone like drugs .

Slide #13 : - Mestranol used in prostate carcinoma .

Slide #14 : - Gossypol is a male contraceptive !!! however it's not 100% effective but some female contraceptive reach about 100% ; therefore female contraceptive is more effective .

Slide #15 : - Precocious puberty is the same as premature puberty .

**** Set of slides #8 :-** Make sure that you have this edited version of his slides ; includes all DM .

Slide #4 : - It's not affected in kids less than 6 months due to maternal immunity .

Slide #6 : - Acute viral infection might be involved in type I DM .

Slide #7 : - Or due to certain life style e.g. fast food , no exercise ...etc.

Slide #10 : - Glycosylated hemoglobin will give you average blood sugar of the last 120 days which is the life span of RBCs .

Slide #13 : - Type I ; exercise might develop hypoglycemia and the patient might go into coma .

Slide #15 : - Modifying the structure might gives you different types of insulin with different affinities .

Slide #16 : - Streptozotocin used also to treat carcinoma in prostate .

Slide #20 : - Bovine + Porcine they have allergic contaminants .

- Recombinant human insulin is the one which is available nowadays .

Slide #21 : - Potency is not that important as you can adjust the dose accordingly , but efficacy is the important + bioavailability .

Slide #22 : - Concentration of insulin is measured in international units .

Slide #23 : - Crystalline zinc used in treatment of emergencies especially in ketoacidosis

Slide #25 : - Peakless insulin is not related to meal , where others with peaks are related to time of meals ingested .

- The timing should be fixed .

Slide #26 : - Hypoglycemia is the main side effect .

- Last point indicates no need for shaking .

Slide #30 : - Insulin jet injections : produce waves that increase the skin pores size and the insulin gas will diffuse through the pore !!!

Slide #33 : - Normally there shouldn't be any side effects , where overdose or not eating enough food to counterattack the effect of insulin will produce those side effects .

- Hypoglycemia is treated by giving glucose orally or IV or giving the patient food containing simple sugars as chocolates not complex carbohydrates .

- Lipodystrophy : the main problem with animal insulin although human insulin might cause it .

Slide #34 : - Oral drugs are preferred by patients more than parental .

Slide #35 : - Metformin : every patient with DM should take it .

Slide #36 : - All are minor except lactic acidosis .

- Lactic acidosis only in phenformin which is not used now .

- Also useful as anti-obesity ; also they interfere with the synthesis of testosterone .

Slide #37 : - Oldest .

- First generation is not used at all due to short half life and due to their pharmacokinetics .

Slide #38 : - Called secretagogues (enhance the release of insulin) so should be given with meals .

Slide #42 : - They have the same efficacy + toxicity effects .

- Drug-drug interactions : they will displace sulfonylurea from their binding protein in plasma .. so increasing the free form of sulfonylurea in plasma .

Slide #43 : - Regarding the first point ; hypoglycemia will coincide with peak of release of insulin or drug effect .

- Allergy might be severe .

- Hypoglycemia will cause the patient to eat more ; therefore hyperglycemia will occur and increases so this will increase the insulin insensitivity .

Slide #45 : - Also will affect lipid absorption .

Slide #47 : - Rosiglitazone withdrawn due to its association with cardiovascular diseases .

Slide #50 : - Decrease gastric emptying will affect drug absorption as most drugs are absorbed by the intestine ; therefore delaying the gastric emptying will delay absorption of these oral drugs .

- Anticholinergic drugs will delay gastric emptying too .

- For contrary drugs that will be absorbed in the stomach by delaying gastric emptying the absorption will increase .

- Drugs that increase gastric emptying , after a carbohydrate meal ... hyperglycemia will occur thus increase in insulin thus increase in insulin insensitivity .

Slide #59 : - It's Beta stimulants not blockers .

Slide #60-61 : - Repeated .

Good luck everyone .

Hope this will help as Dr. Muneer brings some questions outside his slides , but of course from his explanation :)