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B plu

Expt. No. 01. Page No. 01

Prescription Writing

A Prescription is order to a chemist to supply certain drugs is a particular form to a particular patient to be used as directed.

It is a legal document and must be written ligibly and clearly and should indicate precisely what should be given.

It bring in to focus the diagnostic acumen and therapeutic proficiency of the physician. The most carefully carrived prescription order may become therapeutically useless, unless it communicates clearly and adequately instructions the patient on how to take the prescribed medication.

Any non-pharmacological instruction like dietary advice, smoking and education on life style changes, should also be included.

In writing precription it is best to use non-proprietary name followed by the name of the manufacturs in parenthsis if a specific manufactures product has district advantage or if the physician wish works to prevent a change of product or subsequent refills.

Further make sure that the patient has understood the instruction to improve the complains and treatment outcome.

Teacher's Signature : _____

Hense writing a correct and legible prescription is important since illegible or incorrect prescription harms a patient is terms of in appropriate medication. A critical approach towards but also promotes rational use of drugs.

Comman Prescribing Errors :—

Illegible prescription (unreadable)
Ambiguous directions (
Insufficient directions
Inappropriate prescribing of the drugs.

Date _____

Expt. No. _____ Page No. 03

CLINICAL PRESCRIPTION WRITING

1. Dr ABC
   MBBS
   Address
   Tel. NO,
2. Date

for,

3. Mr. XYZ
   IP/ OPD NO.
   Age, sex
   Address

4. Diagnosis

5. Rx

6. Drugs & dosage forms & strength
7. Directions to the pharmacist
8. Direction to the patient

9. Refill
10. Warning.

11. Signature ABC
    Registration No XXX

12. Patient education

Teacher's Signature : _____

Abbreviations	Latin equivalent	English version
Ac	ante cibum	Before meals.
Ad lib	ad libitum	as desired.
bid	bis indie	twice a day
Cap.	Capsula	Capsule
elixir	elexir	Elixer
h	Hora	Hour
HS	Hora somni	at bed time
IM	—	intramuscular
IV	—	intravenous
Inj.	—	Injection.
OD	Omni die	once a day
OM	Omni mane	in the morning
PC	Post cebum	after meal.
PO	—	Per oral
PR	—	per rectal.
qid	quaterin die	four times a day
qs	quaritum sufficit	in sufficient amount
rept	—	repeat.
SC	—	Subcutaneous
SOS	Si opus sit	when needed
Stat	Statim	immediately
tid/tds	ter in die ter in sumendum	3 times a day
tsp	—	teaspoon (equ to 5ml)
tab	tabella	tablet

Date

Expt. No.

Page No. 05

DO'es and Don't of prescription writing

- Write legibly and indelibly
- Should be dated and signed by the prescriber.
- state full name, age and address of the patient.
- The name of the drugs of preparations should be written clearly and not abbreviated.
- Do not write incomplete prescription in terms of drug dosage formulations, strength, dose, frequency route, duration and instruction to the pharmacist and patent.
- The quantity to be supplied may be shoud stated indicating of the number of days of t/t is required.
- Write units not "U".
- Avoid unneccesory use of decimal points. When decimals are unavoidable a zero should be written in front of decimal point eg 0.5 ml not .5 ml.
- Do not geive insufficiant, incomplete direction and instruction.
- State clearly dosing interval, time of day, relation to meals and duration of t/t.
- Instruction the patients not, to add any medicins. should be taken in sitting position with plenty of wates powders,

Teacher's Signature :

- Avoid painful IM injection specially in children.
- Liquid preparations are more suitable for children and elderly patients having difficulty in swallowing tablets and capsules.

Date 17.10.17

Expt. No. 02.

Page No. 07

Acute Rheumatic Fever

- Acute Rheumatic Fever – It is a multisystum diseases resulting from an autoimmune Reaction to inf. with grup a B heamolytic streptococci.
- Rheumatic Heart disease is a seg sequal of ARF and is a most commam cause of heart disease among children in developing

- ARF is mainly a disease of children ages 5-15 yrs caused by upper resp. inf. with group A streptococci.
- Latent period - about 3 weeks (1-5 weeks)
- 2002 - 2003 WHO Critania for diagnosis of RF/RHD based on 1992 revised Jones criteria.

Major	Minor
- Polyarthritis	- Clinical ⇒ fever polyarthritis
- Carditis	- ↑ ESR
- Erythma margination	- ECG - PR ↑
- Chorea.	

Major menifestations :- Carditis, polyarthiritis. chorea, erythema marginatum.

Subcutanious nodules.

Minor menifestations :- ① clinical - fever, polyarthregia
② Labaratary - Raised ESR/& Leucocyt Count.
③ ECG findings - ↑ prolonged P-R interval

Teacher's Signature :

Calamine:-

It is zinc carbonate 98% coloured ē ferric ~~oxide etc~~ oxides 2%. It is an astringent, antiseptic & protective agent.
FeO - mild metallic astringent. It gives pink colour to the powder, which is for cosmetic reasons as it blends well with the skin colour.

Zinc oxide:-

Here it acts as an adjuvant. It is mild astringent, soothing & protective to skin & antipruritic, hence it is useful in irritating skin lesions like sunburn, eczema or slight excoriation.

In dusting powder it mixed ē boric acid → check excessive perspiration.
In adhesive plasters.

Bentonite:-

It is a native hydrated aluminium silicate free from grittiness, insoluble in water but swells upto 12 times its volume forming homogenous

Expt. No. _____ Page No. 09

Acute Rheumatic Fever

- Acute Rheumatic Fever - It is a multisystem disease resulting from a autoimmune reaction to infection with Group a β heamolytic streptococci.
- Pneumatic Heart disease is a sequal of ARF and is a most common cause of heart of heart disease among children developing nation.
- ARF is mainly a disease of children age 5-15 yrs Caused by upper resp. infection with group A streptococci.
- Latent ~~pre~~ period - about 3 weeks (1-5 weeks)
- 2002 - 2003 WHO Criteria for diagnosis of RF/RHD based on 1992 revised Jones criteria.

Major	Minor
- Polyarthritis	- Clinical - fever. polyarthritis
- Carditis	- ↑ESR
- Erythma Margination	- ECG - PR↑
- Chorea	

Major manifestations :- Carditis, polyarthritis, chorea, erythema marginatum, Subcutaneous nodules.

Minor manifestation : ① clinical - fever, polyarthralgia
② Laboratory - Raised ESR / Leucocyte Count
③ ECG findings → ↑ prolonged P-R interval

Teacher's Signature : _____

Supportive evidence of preceding streptococcal infection within last 45 days:-

- Elevated / Rising Antistreptolysin O (ASO) are other streptococcal Ab.
- OR a positive thoat culture on
- Rapid antigen test for group A streptococcus
- Scarlet fever.

Prescription for adults and children (>27kg)

Rx

Antibiotic inj
Benzathin penicillin 1.2 million units/vid
Tab. erythromicin 250 (BD)

Director-Inj. Benzathin penicillin 1.2 million unit/vial
IM as a single doze.

Tab ospirin 75-100 mg/kg per day in 4-6 divied doze for 7 days and then 50mg/kg Perday for next 2-3 weeks

Inj. Benzathin penicillin 1.2 million unit/vial

Direction :- Inj. of 1.2 million unit Benzathin IM every 4 week up to age of 21 yrs or 5 yrs is injected from lost attack Hecurrence.

Signature of ABC
Rg. no XXX

Date _____

Page No. 11

Expt. No. _____

Pt. education :-
. Pt should have early and adequate t/t of sour throat.
• At .. - .. Contact.
. Adherance to 2nd prophylaxis up to age of 21 yrs.

Prescription for children (<27 kg)

Diagnosis Rheumatic fever

Rx

① tab. Aspirin 75-100 mg/kg/day
2) Inj Benzathine penicillin 0.600,000 million unit IM single doze.
③ Inj. Benzathine penicillin 0.600,000 million unit IM upto age of 21 yrs or 5 yrs.

Signature of ABC
Reg No. XXX

Pt. - education
same or above.

Teacher's Signature : _____

Exp No=07 22-10-15

ACUTE TONSILITIS

Acute tonsilitis is the acute inflamation of platine (facial) tonsil.

Actinology-

- Acute tonsilitis often affect school going children.
- Haemolytic Streptococci is the most commaon infecting organism.

Clinical Peatures:-

- Sore throat.
- Difficulty in Swallowing
- Fever
- Earache
- Constitutional symtoms like headache, maltoiseetc.
- Tonsils are enlarged and congested.
- Jugulodiagostric lymphnod's are enlarged and tenden.

Prescription:-

Dr. ABC
MBBS
Adress
Tel no.
Date-

For Mr XYZ-
Age -
Address-
OPD No.-

Δ Acute tonsilitis

Rx ① Capsule Amoxicillin 500 mg
Direction:- one capsule to be taken 3 times a day for 7 days.

② Tablet:- Paracetamal 500 mg
Direction:- one tablet to be taken 4 times a day for 5 days and then whenever required.

③ tablet Ibuprofer 400 mg
Direction:- one tablet to be taken 3 times a day for 5 days and then whenever required.

ABC
Reg No XXX

Date

Page No. 12

Expt. No.

Patient Education :—

1) patient is put to bed and encouraged to take plwty of fluids.
2) Salt water (cuarm) gangluc
3) Steam initiatian through mouth.

Prescription :-

Dr ABC
MBBS
Address.
Date-

For Mr x yz
Ag -
Addres
Hosp. No.

Cloxml	
6	0
Z	0
Z	0
30	0

Rx.
Prepared calamine
ZnO
Glycerine
Water qsp to

Mix and prepare lotion
to be applied externally on the affected part
twice a day without friction.

Note:- 1) Shake well before use
2) For external use only, not to be taken internally.

ABC

Prescription :-

Dr ABC
MBBS
Address.
Date-

For Mr x yz
Ag -
Addres
Hosp. No.

Cloxml	
6	0
Z	0
Z	0
30	0

Rx.
Prepared calamine
ZnO
Glycerine
Water qsp to

Mix and prepare lotion
to be applied externally on the affected part
twice a day without friction.

Note:- 1) Shake well before use
2) For external use only, not to be taken internally.

ABC

Expt. No. 04. Page No. 15

AIM :- Prescribe Prepare and dispence 30 ml of calamine lotion for a patient suffering from sunburn.

Ingredients

	Gr or ml	
	6	0
Prepared Calamine	Z	0
Zinc oxide	Z	0
Glycerine	30	0
Water up to		

Mathod of preparation :-

- Take prepared calamine and ZnO in a required quantity in a dry mostion and paste and grind them to a fine powder.
- Add Glycerine and small quantity of water and mix them to from a smooth cream, then add water again and mix well to make the final volume.
- Transfer this lotion to a measure and make the final volume, dispence with direction :
  i) shake well before use.
  ii. Not to be taken internally, for external use only.

Teacher's Signature :

Expt. No. 04. Page No. 15

AIM :- Prescribe Prepare and dispence 30 ml of calamine lotion for a patient suffering from sunburn.

Ingredients

	Gr or ml	
	6	0
Prepared Calamine	Z	0
Zinc oxide	Z	0
Glycerine	30	0
Water up to		

Mathod of preparation :-

- Take prepared calamine and ZnO in a required quantity in a dry mostion and paste and grind them to a fine powder.
- Add Glycerine and small quantity of water and mix them to from a smooth cream, then add water again and mix well to make the final volume.
- Transfer this lotion to a measure and make the final volume, dispence with direction :
  i) shake well before use.
  ii. Not to be taken internally, for external use only.

Teacher's Signature :

Label :-

LOTION

FOR EXTERNAL USE ONLY
SHAKE WELL BEFORE USE

For Mr XYZ
Direction :- To be applied externally on affected part twice a day without friction.

Date PSR

GMC Jagdalpur pharmacy Lab.

Function :-

Calamine :-
It is zinc carbonate 98% coloured with ferric oxide 2%. It is astringent, antiseptic and protective agent. Fe2O3 mild metallic astringent. It gives pink Colour to the powder, which is for cosmatic reasons as it blends well with the skin colour.

Zinc oxide :-
Here it acts as an adjuvent. It is mild astringent, soothing and protective to skin and antipruritic, hense it is useful in irritating skin lesions like sunburn, eczema or slight excoriation.

In during powders mixed with boric acid - check excessive prespiration.

In adhesive plasters.

Label :-

LOTION

FOR EXTERNAL USE ONLY
SHAKE WELL BEFORE USE

For Mr XYZ
Direction :- To be applied externally on affected part twice a day without friction.

Date PSR

GMC Jagdalpur pharmacy Lab.

Function :-

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In during powders mixed with boric acid - check excessive prespiration.

In adhesive plasters.

Date

Expt. No. _____ Page No. 17

Bentonite :—

It is a native hydrated aluminium silicate free from grittiness, insoluble in water but swelk ep to 12 times its volume forming homogenous mass. Its as protective, absorbent and suspending agent.

Sodium Citrate :-
It acts on suspending agent and decrease the viscosity produced by bentonite.

Thixotrophic Effect :- The property of ~~Gat a~~ certain gel that they liquify when agitated and revent to a gel on standing eg Sodium citrate.

Other uses :—
It can be systemically or an anticoagulant

Teacher's Signature : _____

Date

Expt. No. _____ Page No. 17

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Other uses :—
It can be systemically or an anticoagulant

Teacher's Signature : _____

Expt. No. _____ Page No. 19

SUSPENDING AGENTS

- Compound Powder of Tragacanth — Quantity used for 30ml suspension.

Tragacanth	finely powder	150 Gr	60mg
Acacia	"	200 Gr	
Starch	"	200 Gr	
Sucrose	"	450 Gr	

- Syrup 4ml
- Glycerin 2ml
- Bentonite 600-1500mg
- Sodium alginate 300-600mg
- Methyl Cellulose 300mg

LOTID CALAMINE I.P. (1996)

Formula	Working formula	Gr or ml	
Prepared Calamine	150 Gr 150	7.5	6 0
Zinc oxide	50 Gr	2.5	2 0
Bentonite	30 Gr	1.5	- -
Sodium Citrate	5 Gr	0.25	- -
Liquified phenol	5 ml	0.25	- -
Glycerine	50ml	2.5	2 0
Rose water to	1000ml	50ml	30 0

It is the only official lotion advocated by I.P. others are extemporaneous, It is marketed and Lactocalamine.

Teacher's Signature : _____

LIQUIFIED PHENOL %- (Carbolic acid)

a. Mild Solution (0.2-1%) mostly bacteriostatic and is used or an antiseptic.

Concentrated Solution (2 to 5%) is chiefly bacteriocidal and is used or a disinfectant.

b) It is locally irritant, creasthetic (antipruvitic) and milder costic. Formly it was used or a local analgesic dung with glycerine properties are ↓ by Glycerins alc. and fixed oils or they all affect its Solubility.

. Liquid phenol 0.4% phenol in distilled water.

GLYCERINE % -

1. Suspending agent.
2. Hygroscopic agent - It relieves oedema of boils and Carbuncles.
3. antiseptic (25% conc.)
4. - It is used or a linctor because of viscoid nature and its ability to adhere to the mucosa.
5. Preservative (20-40% Conc) As it Retands Hydrolytic decomposition of certain inorganic and organic Substance.
6. Emollient & - It resders the skin, supple specially when diluted with water in the ratio of 1:3
7 Sweetning agent.
8. It can be used on suppotory for relief of Constripation.
9. It is irritant when applied in a Concentration from.

Date _____

Expt. No. _____ Page No. 21

10) It can be given or an enema (4ml of Glycerine added to 16ml of warm water.

11) As a

C/I :- In conditions where there is much exudation because of formation due to prescriptation of protein in exudate.

VIVA :-

1. What is meast by a lotion?
2. Name of types of lotion?
3. What is the role of each ingredient in calamine lotion
4. What are the use of Calamine lotions.
5. Which substance gives the pink colour to lotion and its significance?
6. What is the function of ferric oxeide in this preparation?
7. Why is Glyceric added to the lotion?
8. What are absorbants? How do they act? Give some example?
9. What do you understand by "thixotropic effect"?

Teacher's Signature : _____

Date 27.10.15

Expt. No. 05 Page No. 23

Gastroesophageal Reflex disease (GERD)

GERD affects 20% of adults, who report at least weekly episodes of heart burn, and up to 10% Co of daily symptoms. Though most patient have mild disease, up to 50% develops esophageal mucosal damage (reflex exophagitis) and a few develop more serious Complications.

Factors which promote GERD

	Mechanism	Factors
1.	Inpaired efficiency of LES	· Hiatus hernia · Sx to lower esophagus eg: Cardiomyotomy · Diabitis mellitas · Prolonged neuro-gastric intubation · Scleroderma
2.	Inpaired efficiency of LES and 2° peristalsis	
3.	Reduction in LES Pressure	· Fatty food · Caffiene
4.	Reduction in LES Pressure and inpairment of oesophageal mucosal function	· Alcohal.
5.	↑ intra abdominal pressure and reduction in LES due to Circulating hormones.	· Pregnancy.

Teacher's Signature :

6. ↑ intra-abdominal pressure
- obesity
- Ascites
- Sx corects.
- Bending and lifting

7. gastric Contents available for reflux
- Impaired gastric emptying
- Pyloric obstruction
- gastroparesis
During eg. - anticholinergic fatty food.
↑ vol. of gastric content.
large meals, Zollinger-Ellison Syndrome.

clinical Features:-

1. Burning retrosternal (Heart Burn) discomfort is the main symptoms. This most after occurs 30-60 min after meals and upon reclining.
2. Odeynophagia (painful swallowing)
3. chest pain (atypical) which may be severe can mimic angina.
4. Regurgitation.

Date _____

Page No. 25

Expt. No. _____

Prescription :—

1. Δ Mild GERD

Rx

Tb. Ranitidine 150mg + OD 30 mins before breakfast x 1 month

2. Δ moderate to severe GERD

Rx

Tb. Pantaparazole 20mg : OD 30min before BF x 1 month

OR

Tb. Rabeprazole 20mg : OD " "

OR

Tb. Larsoparazole 30mg : BD " " x 3month

Patient Education :—

1 wt. less, avoidance of last night meals, elevations of headerd of bed.

2. avoid chocolate, caffiene, tobacoo, alcohal, mint., orangejuice.

3. and certain medications (anticholinergic drugs, Ca channel blocker etc.)

Teacher's Signature : _____

Exp. No.- 16

PEPTIC ULCERS

The term 'peptic ulcer' refers to as ulcer in the lower oesophageal, stomach, duodenum, in the jejunum after surgical anastomosis to the stomach or rarely in the ileum adjacent to Meckels diverticulum. Ulcer in the stomach or duodenum may be acute or chronic.

The male to female ratio for duodenal ulcer varies from 5:1 to 2:1, while gastric ulcers in 2:1 or less.

Actinology:-

1. Helicobactor pylori
2. Heridity - moler 1° relatives.
3. NSAIDs
4. Smoking
5. Acid pepsin vers and mucosal resistance.

Cilinical Features:-

1. Abdominal pain which for 3 notable characteristics localization to the epigastrium, relationship to food and episordic occurrence (commenest)
2. Epigastric pain :- "Paintring sign"
3. Hunger pain
4. Night pain (pathognomic)
5. Pain relief.
6. Episordic pain (periodicity) "on again/off again
7. after symtoms.

specially during episods of pain indicate water baiosti, heartburn, loss of appetite and vomiting.

In a third of patients the Rx is less characteristic especially true in elederly subjects under Rx with NASAIDS Pain may be absent or so slight vagus sense of epigastric uneasy.
In some pts ulcer is completely silent presenting for 1st time with anemia from chronic undetected blood loss, or or obsept haemetosis or or acute perforations.

Rx
Inhibit or neutralise gastric acid or protect the mucosa.
Major classes of drug used are
① H_2O receptor antagonist (Cimidine, ranitidine, famotidine, nizatidine) - limits both basal and stimulated acid Reaction.

2. Ant. acids ($Al_2(OH)_3$, $Mg(OH)_2$, Calcium Carbonate, others) neutralise the gastric acid and provide relatively prompt relief of symptoms once started.

3 Proton pumb inhibitor (omeprazole) - most important antisecretory agent which limiten the terminal step in acid secretion.

Teacher's Signature :

4. Sucralfate :- mucosal protectant without significant antacid effect -

Recommended Rx regience for H. pylori.

Name	Drug 1	Drug 2	Drug 3	Drug 4
OCA	Omeprazole 20mg BD	Clarithromycin 500mg BD	Amoxycillin 1g BD	—
OCM	"	"	Metronidazole 500mg BD	—
OBTM	"	Bismothsubsalicylate TT Tbs qid	Tetracyclin 500mg qid	Metronidazole

Prescription :-

1. Δ peptic ulcer

Rx

- Cap. Omeprazole 20mg + OD × 1 month
  30 mins before BF
- Syr Digene 2 tsp + ds 1/2 hr after meal.
  (2-3 hrs usually compliance)

Refill - Come back for refill after 1 month
[Rx to be contained for 6 wks.)

2. Δ. H. pylori induced peptic ulcer

Rx.

Cap. omeprazole 20mg : BD
Tb. Clarithromycin 500mg : BD
Tb. Amoxicillin 500mg : BD
} X wks

Date

Page No. 29

Expt. No.

Directions:- to be taken along with meals.

Pt. Education :-

① Avoid spicy food, Alcohal and smoking (AU)
2. Nutritive diet taken at regular intervals restriction of coffee, tea, Cola, beverages alcohal and smoking (DU).

Date 03.11.16

Expt. No. 07. Page No. 81

AIM :- To study the effects of drugs on perfused isolated frog heart.

Requirment :- Animal frog.

Physiological Solⁿ :- Frog :. Ringer or ringer locke Solⁿ.

Stock Solution :-

Adrenaline	0.5 ml of	0.0005%	50kg/ml
Acetyl choline	0.5 ml of	0.001%	10kg/ml
Calcium chloride	0.5 ml of	0.5%	5mg/ml
Potacium chloride	0.5 ml of	1%	10 mg/ml.

Appratus :-
Marriot's Bottle.
Syme's Cannula
Dissection instruments
Starling heart level.
Murphy's drip set (IV perfusion set)
Stand with necessary holder
kymograph.

Procedure :-
Frog is dissected to expose the heart after pithing pericardium is removed. The sinus venosus is cannulated. After cutting the Blood vessels the Heart is removed from thoracic cavity and it fixed to appratus. It is

Teacher's Signature :

perfused with frog ringer solution from Mariotis Bottle. The apex of the Heart is fixed to starting heart level with thread. The Contraction of the frog heart are recorded on the kymograph paper.

Observation and Comments :-

(1) Amplitude of Contractions :- total height of Contraction increase indicator a forceful Contraction and so stimulation.

2) Tone :- Increase in tone is indicated by the rise of bore line.

3) Rate :- The Heart Rate at any particular time can be counted by observing the movement of the lever or can distance of bedscribed as no of Contraction in unit distance of the paper the Curve are closer to each other when heart is Stimulate and apart when depressed.

Drug	Response		
	Tone	Rate and Rhythom	Amplitude
1) Adrenaline	↑	↑	↑
2) Acetylcholine	↓	↓	↓ M_2
(3) Atropine	↑	↓	↑ M_2
(4) Calcium chloride	↑	↑	↑] Myocardial cell
(5) Potacium chloride	↓	↓	↓

Date _____

Expt. No. _____ Page No. 33

Inference :-

1. Adrenline increase the cardiac activity through B_1 receptor.

2. Acetyl ~~Chol~~ choline decrease rate and force contraction M_2 receptor.

3. Atropine blocks M_2 receptor. Ach after pinisation. It has no receptor or all the M_2 receptor one blocked.

4. Calcium chloride and potassium chloride increase and decrease the tones of myocardium respectively by acting directing on myocardial cell.

AIM :- To record a dose response curve of acetyl choline using reactus abdominus muscle preparation of frog to demonstrate the nicotinic action of acetylcholine on skeletal muscle.

Requirment :— Animal frog.

Drug :- Acytylcholine, stock soln (1 mg/mL)
Frog ringer Solution.

Procedure :- Pith or scar the frog and by it earits back on the frog dissection board. pith the four units. Remove the skin on the abdomin and expose the rectus muscle preparations before datacting the muscle fiber from the Body of the frog. Mount the preparation in upright position in the organ both containing frog ringer Solution under a tersion of 1g. There is no need of maintaing the both temprature since it is an amphibian tissue preparation. Bubble the organ both with air. Relax the tissue for 45 min during which period wash the tissue with fresh ringer soln. for at least four times. Record the Contractions due to acetylcholine using either simple sideway or frontal writing level Ninty second Contract time and a total 6 min. time cycle may be used for proper reading the respons.

Date _____

Expt. No. _____ Page No. 35

Steps of Recording the response :—

- Start the drum and record baseline.
- Add the drug and record response for 90sec.
- Stop drum give 2-3 washing.
- Give 3-5 min time for tissue relaxation.

Record of least six response of increasing doss of acytylcholin or till you get the maximum responce. the maximum dose responses is achived are gets same or slightly less response.

Inference :—

Acytylcholine facilitat's contraction of muscle. Height of response is increased when the dose is increased But once maximum height is recorded further addition of against will not change the height of response. The dose is called as supra maximum ~~dose~~ effect. Gradual increase in a dose of A-Ch produces dose dependent contractile responce till ceiling effect is reached. Plot the Height of contraction of A-Ch is graph will log dose - Response curve is sigmoid in shape where as dose - response curve.

Dose in microgram	log dose	Height of Contraction in
20 Hg/ml	1.3010	10 mm
40 Hg/ml	1.6020	15 mm
80 Hg/ml	1.9030	16 mm
160 Hg/ml	2.2040	20 mm

Teacher's Signature : _____

320 Hg/mL	2.5050	22 mm
640 Hg/mL	2.5050	22 mm

Discussion :—

A-ch is the neurohumeral substances for somatic Nerve Moter End plate contains nicotinic receptors on which A-ch will act to produce stimulation of skeletal muscle. since the response obtained from frog Hector abdominis moist preparation in uniform and surtained, this experiment can be used for the bio ~~assay~~ array of acetyl choline, Bio array is the determination or estimation of the amount of biological activity in a unit quantity of preparation.

Procedure :-

- weight and number the animals. Divide them into two groups each consisting of 4-5 rats. one group is used as control and other for phenytoin treatment.
- Hold the animal properly. Place corneal/ear electrodes and apply the prescribed current. Not different stages of convulsion. Note the time spent by the animal in each phase of convulsions. Repeat with other animals of Control ~~Group~~ Group.
- Inj. phenytoin intra-peritoneally to a group of 4-5 rats wait for 30min. and subject the animal to electroconvulsion.
- Note the reduction in time or abolition of tonic extensor phase of MES convulsions.
- Inference - A reduction or complete abolition of tonic extensor phase is considered as anticonvulsant property of a drug. phenytoin sodium abolishes MES induced tonic extension phase.

Date 05.12.15

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LEPROSY

Leprosy (Hensen's disease) is a chronic infectious disease caused by myobacterium leprae. It primarily affects skin, mouth, peripheral nerves, nasal mucosa, eye, testies, capsule of affecting any tissue or organs.

Clinical feature —

- Skin Lesion are hypopigmented macule/papule/patch
- Anaesthesia of affected part.
- Present on thickend Nerve.
- Peripheral neuropathy.
- Hypopigmented erythematous macule/papule usually multiple in Lepromatous leprosy and Single in case of tuberculoid Leprosy.
- Eye involvement may cause blindness
- Damage to nasal septum leading to Depressed nasal Bridge.

Classification of Leprosy - NLEP (2009)

Paucibacillary	Multibacillary
1-5 skin Lesions	6 or more skin Lesions
No Nerve / 1 Nerve involed	more than 1 Nerve involved.

Teacher's Signature : _____

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(ii) Prescription for Multibacillary leprosy → Δ leprosy.

Rx

① Capsule Rifampicin 600 mg
Direction :- one capsule to be taken orally once a month on empty Stomach under supervision for 12 months.

② Tablet - Dapsone 100 mg
Direction - one tablet to be taken once a day for 12 month.

③ Capsule clofazimine 300 mg
Direction - one capsule to be taken once a month under supervision for 12 month.

④ Capsule clofaziemine 50 mg
Direction - one capsule to be taken once a day for 12 months.

ABC
Reg No. XXX

Pt. Education →
① Pt. should take medicine regularly.
② Pt should be explained about orange colour of body secretion and urine due to Rifampicin.

Teacher's Signature : _____

A) Prescription for uncomplicated malaria
Δ vivax (also ovale, malariae)

Rx

Tab. chloroquine phosphate 250mg (150mg base)
Direction - 4 tablets as a single dose
followed by 2 tabletes at 8 hrs
then for next 2

Tab. Primaquine 15 mg
Direction - 1 tablet daily x 15 days.

Tab. PCM 500 mg
Direction :- 1 tablet - 3 times a day x 3 days and
then and as when required.

B) Δ chloroquine sensitive malaria PF.

Rx,

Tab. chloroquine phosphate 250 mg (150mg base)
Direction :- 4 tablets as a single dose followed
by 2 tab. and then for next 2 days.

Tab. Primaquine 15 mg
Direction - 3 tablets taken to be as
single dose.

Tab. PCM
Direction - 1 tablet 3 times a day x 3 days
and then as and when regd.

ABC
Reg No. XXX

Date _____

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Patient Education →

- Measure should be taken to prevent mosquito Breeding eg proper sewage drainage, preventing stagnation of water and spreading oil over the water help's to kill the Larva.

- Protective measures should be taken like sleeping under mosquito net and wearing protective clothing.

- Travelus to Endemic area must take prophylaxis.

B plus

Book outline

 Teacher's Signature : _____