

Section-3

QIMP-19 APPENDICES & INDICES

APPENDIX: I

NORMAL LAB VALUES

(Reference values only; normal ranges will vary between labs)

Hematology:

Hgb	M : 13.5-17.5 g/dl F : 12.0-16.0 g/dl
Hematocrit	M : 39-49% F : 35-45%
RBCs	M : 4.3-5.7 (x10 ⁸ /11) F : 3.8-5.1 (x10 ⁸ /11)
Platelet	150-450 x10 ³ /11
WBCs (Total)	4.5-11.0 x10 ³ /11
Neutrophils	57-67%
Segs	54-62%
Bands	3-5%
Lymphocytes	23-33%
Monocytes	3-7%
Eosinophils	1-3%
Basophils	0-1%
ESR	M : <15 mm/1st hr F : <20 mm/1st hr
Fe	M : 65-175 tg/dl F : 50-170 tg/dl
Fe Sat	M : 20-50% F : 15-50%
FDP	<10 vtg/nnl
Ferritin	M : 20-250 ng/ml F : 10-120 ng/ml
Fibrinogen	150-350 mg/dl
Haptoglobin	26-185 mg/dl
Hgb Aic	5.0-7.5%
MCH	26-34 pg
MCHC	33-37%
M CV	80-100 fl
PT	10-14 sec
aPTT	20-40 sec
Reticulocytes	0.5-1.5%
TIBC	250-400 tg/dl
Transferrin	200-400 mg/dl
TT	13-20 sec

Chemistries:

Na+	135-145 mEqA
K+	3.5-5.3 mEqA
Cl-	95-105 mEqA

HCO ³⁻	22-29 mEq/l
BUN	10-26 mg/dl
Creatinine	0.6-1.3 mg/dl
Glucose	70-115 mg/dl
Anion Gap	7-16 mEq/l
Osmolality	275-300 mOsm/kg
Ca ²⁺ total	8.5-10.5 mg/dl
Ca ²⁺ ionized	4.65-5.28 mg/dl
Mg+	1.3-2.4 mEq/l
Phosphate	2.5-4.5 mg/dl
αFP	<10 ng/mol
Albumin	3.5-5.5 g/dl
IgA	70-312 mg/dl
IgG	640-1350 mg/dl
IgM	56-350 mg/dl
Lactate	0.5-1.3 mEq/l
Protein (total)	6.0-8.0 g/dl
Uric Acid	M : 3.0-7.4 mg/dl F : 2.1-6.3 mg/dl
Zn	55-135 µg/dl

Liver/Pancreas:

ALT	0-40 I U/l
Alkaline Phosphatase	M : 38-126 U/l F : 70-230 U/l
Ammonia	10-50 µmol/l/l
AST	7-40 I U/l
Bilirubin (total)	0.2-1.0 mg/dl
Bilirubin (conjugated)	0-0.2 mg/dl
GGT	0-50 U/l
L DH	90-190 U/l
Amylase	25-125 U/l
C peptide	0.7-1.89 ng/ml
Lipase	10-140 >60yo: 10-180

Lipids:

Total Cholesterol	<200 mg/dl
LDL	<130 mg/dl
HDL	M : >29 mg/dl F : >35 mg/dl
Triglycerides	M : 40-160 mg/dl F : 35-135 mg/dl

APPENDICES & INDICES

QIMP-19 (718)

Other:

CPK	M : 38-174 U/I F : 26-140 U/I
CPK MB	<5%
Acid Phosphatase	<0.8 IU/ml
B12	100-700 pg/ml
CA-125	<35 U/ml
Cu+	M : 70-140 µg/dl F : 80-155 µg/dl
Folate	3-15 ng/ml
Pb	<10 µg/dl
PSA	<4.0 ng/ml
Zn2+	70-150 µg/dl

Blood Gases:

	Arterial	Venous
pH	7.35-7.45	7.32-7.42
pCO2	35-45	41-51
pO2	80-100	25-40
HCO3	21-27	24-28
O2 sat	95-99%	

Urine:

pH	5-9
Minimal Volume	0.5-1.0 mg/kg/hr
Specific Gravity	1.015-1.030
Osmolality	600-1400 mOsm/kg
Creatinine	M : 14-26 mg/kg/day F : 11-20 mg/kg/day
Creatinine Clearance	M : 100-150 ml/min F : 90-140 ml/min *rough estimate only; varies with BMI
Urea Nitrogen	12-20 g/day
Ca2+	100-300 mg/day
K+	25-125 mEq/day
Na+	40-220 mEq/day
Phosphate	0.4-1.3 g/day
Uric Acid	250-750 mg/day
Albumin	10-100 mg/day
Amylase	1-17 U/hr
Glucose	<0.5 g/day
Protein	10-100 mg/day

CSF:

Pressure	60-180 mmH2O
WBC	0-5 /µl
Protein	15-45 mg/dl
Glucose	40-80 mg/dl

Synovial Fluid:

WBC	<200 /µl
Trauma, OA, SLE :	<3,000 /µl
Gout, RA :	>4,000 /µl
Septic :	>60,000 /µl

Protein	<3.0 g/dl
Glucose	>50 mg/dl
Uric Acid	<8.0 mg/dl
LDH	< Serum LDH

Endocrine:

Aldosterone	Supine : 3-10 ng/dl Upright : 5-30
Cortisol	0800h : 6-23 µg/dl 1600h : 3-15 µg/dl 2200h : ≤50% of 0800h value
Gastrin	<100 pg/ml
GH (<60yo)	M : <2 ng/ml F : <10 ng/ml
GH (>60yo)	M : <10 ng/ml F : <14 ng/ml
Estrogen	Follicular: 60-200 pg/ml Luteal: 160-400 pg/ml Menopause: ≤130 pg/ml
FSH	Follicular: 1-9 mU/ml Ovulation: 6-26 mU/ml Luteal: 1-9 mU/ml Menopause: 30-118 mU/ml
LH	Follicular: 1-12 mU/ml Mid-cycle: 16-104 mU/ml Luteal: 1-12 mU/ml Menopause: 16-66 mU/ml
Progesterone	Follicular: 0.15-0.7 ng/ml Luteal: 2.0-25 ng/ml
Prolactin	<20 ng/ml
PTH	10-65 pg/ml
Sperm	20-200 million/ml
Testosterone	Free 52-280 pg/ml Total 300-1000 ng/dl
T3	Uptake 0.82-1.18 Total 100-200 ng/dl
T4	Total 5.0-12.0 µg/dl Free 0.3-2.3 ng/dl
TBG	16-34 µg/dl
TSH	<10 µU/ml >60yo M: 2-7.3 µU/ml >60yo F : 2-16.8 µU/ml

Toxic Levels:

Acetaminophen	>200 µg/ml
CO Hgb	>20%
EtOH (in a non-alcoholic patient)	Intoxicated: >100 mg/dl Lethargic: >200 mg/dl Coma: >300 mg/dl
	Resp. Distress, Death: >500 mg/dl
Ethylene Glycol	>20 mg/dl
Lead	>100 µg/dl
MeOH	>200 mg/l
Salicylate	>300 µg/ml

◆ ◆ ◆

APPENDIX : 2**C.S.F PICTURE IN DIFFERENT MENINGITIS^{1,2,3}**

<i>TESTS</i>	<i>MENINGITIS</i>				<i>MULTIPLE SCLEROSIS</i>
	<i>Normal</i>	<i>Pyogenic</i>	<i>Tuberculous</i>	<i>Viral</i>	
Appearance	Crystal colour	Yellow and turbid	Colourless and crystal clear, slightly turbid if stands forms cobweb	Usually clear	Clear and colourless
Pressure	50-180 mmCSF	Raised/ Normal	Raised/ Normal	Raised/ Normal	Not Raised/ Normal
Total Protein	< 500mg/l	Increased	Increased	Slightly increased/ Normal	Normal but gamma globulin raised
Glucose	$\frac{2}{3}$ blood level	Reduced	Reduced	Normal	Normal
Chloride	120-130mmol/L	Reduced	Reduced	Normal	Normal
Cells	0-4/ cmm honuclear	Polymorposis (50-500/cmm) pleocytosis 1000-5000/cmm	Lymphocytic pleocyt-pleocytosis	Lymphocytic pleocytosis 10-2000/com	Slight lymphocytic 0-700/cmm
Lange curve		Meningitic	Meningitic paretic	May be	Paretic
Bacteriology	Sterile	Causal organism isolated on gram stain & culture	Mycobacterium tuberculosis on ZN stain & culture	Sterile Some times viruses	No organism

* Pleocytosis- Increased number of cells in C.S.F. is known as pleocytosis.

APPENDIX : 3**BPA IMMUNIZATION SCHEDULE¹⁵¹**

Age	Name of vaccine	Dose & Route of administration	Duration of immunity	Remarks
Birth	BCG Oral Polio Vaccine - 1st dose Hepatitis B Vaccine - 1st dose	0.1 ml intradermally 0.5 ml orally 0.5 ml i.m injection	- 6 years - 4 years - 15 years (3 doses)	Under 'EPI' ,, ,,
6 Weeks	DPT - 1st dose Oral Polio Vaccine - 2nd dose Hepatitis B Vaccine - 2nd dose	0.5 ml i.m injection 0.5 ml orally 0.5 ml i.m injection	- 4 years	Under 'EPI' ,, ,,
10 Weeks	DPT - 2nd dose Oral Polio Vaccine - 3rd dose	As above ,,		,, ,,
14 Weeks	DPT - 3rd dose Oral Polio Vaccine - 4th dose Hib-1st dose	As above ,, 0.5 ml i.m or s.c injection		Under 'EPI' ,, —
20 Weeks	Hib - 2nd dose	As above		
6 Months	Hepatitis B Vaccine - 3rd dose Hib - 3rd dose	As above ,,		
9 Months	Measles Vaccine	0.5-1 ml i.m or s.c injection		
1 Year	Chickenpox (optional) Hepatitis A Vaccine (optional)	Not available (not needed) 0.5 ml i.m injection (single dose)		Eradicated from Bangladesh (?)
15-18 Months	MMR (Measles, Mumps, Rubella) - 1st dose Oral polio Vaccine - 5th dose DPT - 1st booster dose	0.5 ml i.m or deep s.c injection As above ,,		
2 Years	Typhoid Vaccine (single dose) Hepatitis A Vaccine (booster)	0.5 ml i.m or deep s.c injection As above		
5 Years	DPT - 2nd booster dose Oral Polio Vaccine - 6th dose MMR (Measles, Mumps, Rubella) - 2nd dose Hepatitis B Vaccine - 1st booster	As above ,, ,, ,,		
10 Years	Hepatitis B Vaccine - 2nd booster TT (Tetanus Toxoid) - 1st dose	As above 0.5 ml i.m or deep s.c injection		
12-14 Years	MMR (Measles, Mumps, Rubella) - 3rd dose	As above		
15-16 Years	TT (Tetanus Toxoid) - 2nd dose	As above		

Bangladesh Pediatric Association Modified Immunization schedule.

APPENDIX : 4**FDA PREGNANCY CATEGORIES:¹⁶¹**

The FDA has established five categories to indicate the potential of a drug to cause birth defects if used during pregnancy. These pregnancy categories are used in the drug formulary, given as below:

Category A

Adequate and well-controlled studies have failed to demonstrate a risk to the fetus in the first trimester of pregnancy (and there is no evidence of risk in later trimesters).

Category B

Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in pregnant women.

Category C

Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.

Category D

There is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience or studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.

Category X

Studies in animals or humans have demonstrated fetal abnormalities and/or there is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience, and the risks involved in use of the drug in pregnant women clearly outweigh potential benefits.

Source: www.drugs.com/pregnancy-categories

APPENDIX : 5**EDD & OBSTETRIC TABLE****DETERMINATION OF EDD:**

Determination of 'Expected Date of Delivery (EDD)' can be done by using 'Obstetric table', which is given below.

OBSTETRIC TABLE:

Obstetric table is calculated from the first day of the 'last menstrual period (LMP)'.

January October	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	January November
February November	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5	February December
March December	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	March January
April January	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4	April February
May February	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	May March
June March	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7	June April
July April	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	July May
August May	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7	August June
September June	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	September July
October July	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7	October August
November August	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	November September
December September	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6	December October
	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7	