Final diagnosis

1) Esophageal Atresia (EA/TEF)
2) Hypertrophic pyloric stenosis (HPS)
3) Duodenal Atresia (DA)
4) Jejunal-Ileal Atresia
5) Meconium Ileus (MI)
6) Biliary atresia (BA)
7) Hepatoblastoma
8) Omphalocele
9) Gastroschisis
10) Anorectal malformation (AA)

General Information

1 – Sex: boy□ girl□ 2 - Admission date: 3- race: 4- mobile: 5- Parent Consanguinity: yes /no

Maternal History:

Gravid :	Delivery Type : NVD C / S	PROM :	Artificial Fertilization : IVF/ IUI /Microinjection
Gestational Age:	Mother Age at delivery:	Gestational DM	preeclampsia / eclampsia
Smoker :	Drug User	Drug kind	Twin :

Assessment

Present Weight:	Birth Weight		Failure to pass meconium within the first 24-48hr
Feeding Condition:	Breast Feeding	Formula Feeding	Breast Feeding+ Formula Feeding

Clinical presentation:

Anomalous umbilical cord	Abdominal wall defect	Feeding intolerance	Abdominal distention
Abdominal wall edema/ erythema	sepsis	Palpable mass	Respiratory distress
Bloody vomiting	Drooling	Projectile vomiting	Bilious vomiting
By NGT: Bile-stained gastric fluid usually exceeds 20ml	Nonbilious vomiting	Acholic Stool	Hemihypertrophy
rectum opens into the lower part of the vagina in females	rectum close to the scrotum in males	Constipation	

Laboratory data:

Lab data	***on admission***	***Date……***	***Date……***
CBC			
WBC			
Neutrophil			
Lymphocyte			
Eosinophil			
Monocyte			
MCV			
Hb			
Platelet			
GTT			
AFP			
BHCG			
Retic. count			
Blood culture			
PT			
PTT			
INR			
AST			
ALT			
T.Bili			
D. Bili			
Albumin			
AlkP			

BS			
Urine analysis			
WBC			
RBC			
PH			
Urine culture			
Biochemistry			
BUN			
Urea			
Creatinine			
Na			
Cl			
K			
Ca			
Phosphorus			
Mg			
CRP			
Blood Gas			
pH			
PCO2			
HCO3			
O2 Saturation			
PO2			
Hormone			
TSH			
T4/free T4			
T3/free T3			
Infections			
CMV (IgM/IgG/PCR)			
HSV (IgM/IgG/PCR)			
EBV (IgM/IgG/PCR)			
Toxoplasmosis (IgM/IgG/PCR)			
HIV (IgM/IgG/PCR)			
Genetic study			
Prenatal CF carrier screening by buccal brushing:	Two CF mutations identified	One or No mutations identified	
Sweat chloride test	Na	Cl	
Blood group Rh			

Imaging:

Fetal Ultrasonography:	nl/abnl	polyhydramnios oligohydramnios Areas of calcification throughout the peritoneal cavity Hyper echoic intra abdominal mass No visualization of the gall bladder Dilated bowel Other:
Abdominal- pelvic Ultrasonography:	nl/abnl	Micro Gallbladder□ Triangular Cord Sign Absences of Gallbladder preduodenal porta vein □ asplenia□ polysplenia□ Hepatomegaly Splenenomegaly Lymphadenopathy paraaortic large kidney abdominal mass Volvulus Pyloric Muscle thickness:……mm

		Pyloric channel length:…….mm Target sign IN HPS Donut sign in HPS Other:
Sacrospinal sonography	nl/abnl	
HIDA/DISIDA scan:	nl/abnl	Patency of the extra hepatic biliary system visualization of radionuclide in intestine Other:

CXR	Normal	Mediastinal Widening	cardiom egaly	others		
Abdominal XR	Tripple bubble sign			Double bubble sign	Ground glass appearance	Gas less abdomen
pelvic x-ray:		Sacral anomaly				

Brain sonoGRAPHY	Normal	GMH	IVH	ICH

Barium swallow & Fluoroscopy	String sign	Beak sign	Shoulder sign	Tit sign
	Double road track sign	Umbrella sign	Retrograde peristalsis	Sever stomach peristalsis & delayed drainage

Cardiac echocardiography	nl/abnl
VCUG	nl/abnl

Treatment and surgical findings

Surgery

Op Age: **op Date:** **op Duration:**

1- Esophageal Atresia (EA/TEF)

Type of Atresia:

EA with distal TEF		Isolated EA		Isolated TEF or H Fistula	
EA with proximal TEF		EA with double TEF		Esophageal stenosis	

Management:

-Anastomosis type

Primary		Delayed	

-Type of staged repair:

Esophageal Elongation									
Esophageal replacement		Gastric pull up (Transposition)		Colon replacement		Jejunal replacement		Gastric tube replacement	

Trans Anastomotic Tube **(TAT)**			**Chest Tube**				
Gastrostomy			**Jejenostomy**			**Esophagostomy**	

2- Hypertrophic pyloric stenosis (HPS):

-Type of surgery:

Classic pyloromyotomy (Ramsteadt)	Laparoscopic pyloromyotomy

3- Duodenal Atresia (DA)

OP Finding :

Duodenal Obstruction	Malrotation	Annular Pancrease
Collapse Duodenum & Jejunum	Hypertrophied& dilated proximal obstruction	Complete Obstruction
Sites of Duodenal Obstruction		

4-Jejunal-Ileal Atresia

Morphologic classification of small bowel atresia & stenosis:

JI Atresia Type1	Mucosal(membranous) atresia
JI Atresia Type2	Cord atresia

JI Atresia Type3a	Gap atresia
JI Atresia Type3b	Apple-peel atresia, Christmas tree, Maypole deformity
JI Atresia Type4	Multiple atresia
JI Stenosis	Stenosis

5-Meconium Ileus (MI)

-OP technique: **(the approach to each infant should be individualized)**

1-Tube enterostomy							
2-Enterostomy & resection		a-Double barreled enterostony **(Mikulicz)**		b-Distal chimney enterostomy **(Bishop-Koop)**		c-Proximal enterostomy **(Santulli-Blanc)**	
3-Resection &primary anastomosis		4-Appendecostomy		5-Tube appendecostomy			

6-Biliary atresia (BA)

Technique:	Kasai Hepatic Portoenterostomy		Hepaticoentrostomy		Portocholecystostomy
Portoenterostomy :30-40-cm Roux-en Y Loop is Prepared by transecting the jejunm approximately 15- 25 cm downstream from the ligament Tratez					
	Temporary distal limb drainage		Nipple		

OP Modification:

1-use of an intussusceptions valve :
2-Portoappendical duodenostomy :
3-Transplantation as initial therapy :

OP Finding :

Intraoperative cholangiography:	Cholangiography determine the Type of BA & to differentiate BA from Neonatal hepatitis
-Type of BA:	**I II III**

7-Hepatoblastoma

Bone Marrow Aspiration:

Normal		Abnormal		

Findings:

Location of Tumor	Metastasis	Stage of Disease…	
Location of Metastasis	Lung	Brain	Bone

8-Omphalocele

-Clinical Presentation:

1-Defect Size :	> 4cm			< 4 cm			
2-Site of the Umbilical Cord	Center of membrane			Right to Defect		Left to Defect	
4-Herni Contents	Liver		Spleen	Bowel	Small Large	Others:	

OP Type:

1-Primary Immediate Closure		
2-Primary Closure	Placement Mattress sutures in all Layers exception Rectus. Abd. Muscle midline fasia	
3-Delayed Closure		
4-Staged Closure	Frequency : 2 □ 3 □ 4□ 5 □ …	Dacrone □ Reinforced Silastic Silo as a temporary cover
7-Ladd Procedure		

Giant Omphalocele:

Staged Reduction :	**Step Replacement** : 1- Intestine □ 2- Liver □ 3- …	
1-Reduction of the Abd. Contents	Time :	
2-Reduction Contents of the Prosthatic Sac	Within 1Week after the initial op	Others …

9-Gastroschisis

Findings

1-Defect Size		< 4 cm		> 4 cm			
3-Defect Covered by		Membrane sac		Open & Absent			

Management :

9- Bowel Resection	**Yes no**			
12- Staged Closure with	Spring Loaded Silo (SLS)		Dacron reinforced Silastic Sheet	

10-Anus anomalies:

- Classification in males:

Perineal fistula		Medial raphe of scrotal fistula		Anal stenosis		Prostatic recto urethral fistula	
Rectum-bladder neck fistula		Rectal Atresia		Without fistula		Bulbar recto urethral fistula	

-Classification in females:

Perineal fistula		Vestibular fistula		Rectal Atresia		Without fistula		Vaginal fistula	
Cloacas with a common channel <3 cm		Cloacas with a common channel >3cm		Anal stenosis		Complex malformation			

-Management:

-Definitive operation after neonatal colostomy:

PSARP		Abdominoperineal pull through		Minimal PSARP		PSARVUP		Y-Vplasty	

Discharge condition

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Good	Expire	Others :

Cause of mortality:

Pulmonary Insufficiency	With the use of Prosthetic Silo usually Secondary Sepsis	Prematurity	Others :
Bleeding	Refractory to treatnment	Infection	Primary Cancer
Others			

Death: yes no Date of Death:

Outcome

1-Esophageal Atresia (EA/TEF)

Anastomotic leak	Tracheomalacia	Pneumothorax	Jaundice	GE Reflux
Empyema	Abscess	Mediastinitis	Recurrent fistula	Stenosis
Stenosis	GE Reflux	Dys motility	FTT	TE Fistula
Tracheomalacia	Food impaction	pseudodiverticule	Respiratory sys	

2-Hypertrophic pyloric stenosis (HPS)

late complication:

Consistent vomiting (incomplete pyloromyotomy)		Wound infection	Wound opening
Peritonitis	Reflux	Others:	

3-4-5- Atresia

3-Duodenal Atresia (DA)
4-Jejunal-Ileal Atresia
5-Meconium Ileus (MI)

Early Complication :

Anastomotic Leak		Surgical Injury to the bile duct		Sepsis		Others :

Long-Term complication :

Recurrent abdominal Pain	Chronic Diarrhea	Gallstone	blind –Loop Syndrome
	Peptic ulcer disease		Others :

6-Biliary atresia (BA)

Cholangitis	Acholic stool (post OP)	Compensated cirrhosis	decompensated cirrhosis	Persistent jaundice (post OP)
biloma0	Intra hepatic cysts	poor Weight Gain	Fever	

Late follow up:
Need Liver Transplantation : yes no
Age &Date &Duration of OP (Liver Transplantation) :

1-No bile drainage at all ,because major clinical deterioration will be inevitable
2-Presence of signs of developmental retardation or their sequelae if they become uncontrollable
3-Complications / side effects being socially unacceptable
4-Not cleared jaundice after portoenterostomy
5-End stage liver disease
6-High Hepatic artery resistance index measured on Doppler US is an ominous sign
7-others :

7-hepatoplastoma

Remission: yes no
Relapse: yes no
Metastasis: yes no
Need to liver transplantation: yes/no

8- Omphalocele
9- Gastroschisis

Complication

Necrotizing Entrocolitis (NEC)	Renal Insufficiency	Pneumonia	Abd wall breakdown	PDA

Liver Laceration due to force – retractor Hepatic vein obstruction		Groin and lower extremity edema	Sepsis
Abdominal wall cellulites	TPN related cholestasis	Compartment Syndrome	
Decreased Venous Return	Decreased Pulmonary Compliance	Others :	

Long Term Follow up :

bowel Habits :	Small bowel obstruction :	Adhesion	Midgut	volvulus	Cryptorchidism
Short Bowel Syndrome	Residual or recurrent abdominal wall hernias			Others :	

10-Anus Anomalies (AA)

Follow up:

Chronic Constipation	Recurrent UTI	Urinary incontinence	Retentive Fecal incontinence	nonRetentive Fecal incontinence