

SAUDI COUNCIL FOR HEALTH SPECIALTIES

Saudi Board of Surgery

Fellowship in Pediatric Surgery of Saudi Arabia (FPSS)

INTRODUCTION

The population of the Kingdom of Saudi Arabia is one of the fastest in growth in the world. More than half of the population is below the age of 15 years. Also, with the increase in the quality of medical services, particularly in high-risk pregnancy and neonatology, the need for pediatric surgeons is growing. The aim of the Pediatric General Surgery Fellowship Program is to provide a well-qualified pediatric surgeon, who will be able to look after children with surgical problems. The Fellow will gain the required expertise in this field by spending enough time in one or more well-equipped centers to allow him/her to develop appropriate competence in the period suggested.

PROGRAM OBJECTIVES

General:

- 1.0 To acquire all of the required knowledge, skills and attitudes needed to practice and teach Pediatric General Surgery, and to participate in the progress of Pediatric General Surgery through research and publication.
 - 1.1 To familiarize himself/herself thoroughly with the clinical recognition, natural history and embryology of all conditions relevant to Pediatric General Surgery.
 - 1.2 To acquire the pathophysiology of these conditions, and the physiological response of the child to trauma and surgery.
 - 1.3 To be able to undertake fully the general supportive care of pediatric surgical patients, especially newborns.
 - 1.4 To be able to perform independently all surgical procedures in the field of Pediatric General Surgery.
 - 1.5 To acquire the appropriate attitudes required to deal with specific personal stress involved in the practice of Pediatric Surgery and stress experienced by patients and their families.
 - 1.6 To reinforce the principles of ethical behaviour previously acquired, and familiarize himself/herself with ethical issues of particular relevance to Pediatric Surgery.
 - 1.7 To develop the specific communication skills required to deal with children and their parents.
 - 1.8 To develop an awareness of Quality Assurance issues specifically related to the specialty.

2.0 To acquire the theoretical and practical knowledge necessary to succeed in the certifying examinations, after the successful completion of training.

3.0 The candidate may practice general surgery in addition to pediatric surgery provided, he/she fulfils the following requirements for adult general surgery:

- a) Degree.
- b) License.
- c) Privileges.

Specific:

1.0 Knowledge

1.1 Pediatric General Surgery Rotation (27 months).

Upon completion of the training period, the Fellow should be able to diagnose, manage, and give prognosis on the index cases of Pediatric Surgery listed under the **Operative Procedures** (pages 20-21). He/She should demonstrate teaching abilities.

1.2 Neonatology Rotation (2 months)

Rotation-specific learning objectives for the neonatology rotation are those listed in the above Curriculum. In addition, it is mainly, but not exclusively, during this rotation that the Fellow should familiarize himself/herself with the genetic aspects of Pediatric Surgery conditions.

The following guidelines will direct the conduct of this rotation:

- 1.2.1 The Fellow is jointly responsible to the Division Head in Neonatology and in Pediatric General Surgery.
- 1.2.2 During the day, his/her primary responsibility is to the Neonatal Unit and he/she will participate in all of its activities.
- 1.2.3 He/She will have a particular, but not exclusive, responsibility towards surgical neonates. In fact, the main purpose of the rotation is to familiarize himself/herself with all aspects of caring for the sick neonates in general.
- 1.2.4 By common agreement with the Director of the Neonatal Unit, he/she will take night call in Pediatric General Surgery and may be excused from the Neonatal Unit to operate on index cases and to attend Pediatric General Surgery rounds.
- 1.2.5 An evaluation form will be completed at the end of the rotation by the Division Head in Neonatology.

1.3 Pediatric Intensive Care Unit Rotation (2 months)

During this period, the Fellow will have responsibilities similar to those in the Neonatology rotation. A set of special objectives will be directed towards the care of children with multiple trauma, pre-and post-operative management of surgical patients, including fluid management, different types of ventilators and ventilatory support of sick children, and also the different procedures carried out in the unit, e.g. air-way management, vascular access, etc.

1.4 Pediatric Urology (3 months)

The Fellow is expected to familiarize himself/herself with the procedures in relevance to Pediatric General Surgery, including Endo-urology.

1.5 Elective Rotation (2 months)

The Fellow will spend two months in one or more of the following services: Pediatric Cardiac Surgery, Pediatric GI Service, Pediatric Radiology, Pediatric ENT, Pediatric Anesthesia. Feedback from the Fellow will ensure whether he/she is benefiting from these rotations. Prior approval of the training committee is mandatory for the elective rotations.

Evaluation of the Fellow's fulfillment of the knowledge objectives will be accomplished formally through in-training oral examinations, as well as through a written examination in the same format as the final certifying examination. A clear demonstration of improvement in knowledge during the course of training is expected.

2.0 Skills

By the end of training, the Fellow should have acquired skills appropriate to those of a junior consultant in the following areas:

2.1 Pre-operative care, which includes:

- 2.1.1 History and physical examination skills specific to the infant and child, and the skills necessary to interview parents to explain the diagnosis, the proposed treatment and the prognosis, and to obtain an informed consent.
- 2.1.2 Appropriate use and interpretation of diagnostic aids.
- 2.1.3 Preparation of the patient for surgery, including assessment of anesthetic risk. This will be evaluated by direct observation on an on-going basis, and formally reported on the evaluation form. It will also be tested during in-training examinations, to which the Saudi Council for Health Specialties standards will apply.

2.2 Operative care:

This includes both minor and major surgery, with the emphasis on index cases. The Fellow must demonstrate an ability to exercise judgement and control in

unexpected situations, and ingenuity in dealing with “one-of-a-kind” problems. He/She should demonstrate an ability to assist more junior colleagues in the performance of procedures, and should be able to operate independently.

This will be evaluated by direct observation on an on-going basis, and formally reported on the evaluation form. A log of all operative procedures must be kept and provided to the Program Director on an official form (available from his office).

2.3 Postoperative care:

The main emphasis here is on maintenance of homeostasis (fluids and electrolytes, temperature control, monitoring, etc.) and on early recognition of complications, pain control, etc. This will be evaluated by direct supervision and reviewed at the time of ward rounds and formally reported on the evaluation form.

2.4 Ancillary skills, which include:

- 2.4.1 Techniques of venous access, simple or complex, especially in small infants.
- 2.4.2 Basic pediatric endoscopy (GI and tracheobronchial), including dilatation of esophageal strictures.
- 2.4.3 Emergency control of the airway-mask ventilation, endotracheal intubation and tracheostomy.
- 2.4.4 Access to body cavities: tube thoracostomy, peritoneal dialysis, etc.
- 2.4.5 Management of fluid, electrolyte and acid-base derangements in children.
- 2.4.6 Management of enterostomies.
- 2.4.7 Pediatric Laparoscopic Surgery.

A clear demonstration of improvement in the development of these skills must be demonstrated throughout the course of training.

3.0 Attitudes:

He/She will be expected to develop and demonstrate appropriate attitudinal and relational skills relative to the child and his family in the clinical context, and similar interpersonal skills with other caregivers and hospital staff.

The issues that are stressed are essential components of practice: these relate to communication skills, teaching skills, critical appraisal of the literature, lifelong learning skills, and knowledge of quality assurance, medico-legal and ethical issues.

Some of this will have been acquired during medical school and General Surgery training, but the following objectives are more or less specific to Pediatric Medicine and Surgery:

- Relative to communication skills, the ability to communicate with the child at his/her level in a non-threatening way is essential. Ability to anticipate and address parents' questions and concerns must be developed. The trainee must learn to accept that sometimes a large investment of time must be made in dealing with families, but that this is always rewarded later with a better therapeutic relationship.
- Relative to critical appraisal, the Fellow must have formed his/her own opinion, by the end of training, on what specific procedure he/she will use for what specific conditions, given the wide choice of accepted procedures for conditions such as Hirschsprung's disease, gastroesophageal reflux, etc. He/She should be able to justify that choice and this will be tested on in-training examinations. He/She should be able to critically evaluate articles presented at the Journal Club.
- Medico-legal and ethical issues sometimes overlap. However, the rules and regulations of the country apply. The following specific issues, among others, should be addressed through reading and attendance at ethics rounds and more informal discussions:
 - a. Informed consent in children.
 - b. Refusal of treatment, especially in situations where "quality of life" is a major issue.
 - c. Inter-parenteral conflict in treatment decisions.
 - d. Withholding of treatment.
 - e. Parent-physician conflict in treatment decisions. Physician-physician conflict in same.
 - f. Am I treating this child as I would want my own child to be treated?
 - g. Ethics of research on children.

ADMISSION REQUIREMENTS

The Fellow must meet the following requirements:

1. Successful completion of an accredited residency-training program in general surgery, passing admission examination and interview.
2. Saudi Board certification/eligibility in general surgery, or the equivalent within three years of certification.
3. Sponsorship.

DURATION OF THE PROGRAM

The Pediatric General Surgery Program is a three-year program; the Fellow will spend the following length of time in each area:

1. Pediatric General Surgery (27 months)
2. Neonatal Intensive Care Unit (NICU) (2 months)
3. Pediatric Intensive Care Unit (PICU) (2 months)
4. Pediatric Urology (3 months)
5. Elective Rotation (2 months)

The Fellow must adhere to the rules and regulations of the Saudi Council for Health Specialties during the training period. The candidate will be granted four weeks of holiday per year, as well as one Eid holiday per year, as determined by the training Hospital concerned.

SELECTION OF THE CANDIDATE

A National and/or Regional Committee, which will interview the candidates, will also select the Fellow.

The following are required:

1. Three confidential letters of reference will be solicited.
2. A written examination and an interview must be conducted to evaluate each candidate.

The selection should follow strict criteria to ensure fair competition between the candidates.

EVALUATION AND CERTIFICATION

1. The trainee will be evaluated according to the regulations of the Saudi Council for Health Specialties.
2. The promotion of the candidate from one level to another will be determined by:
 - a) passing end year in training examination.
 - b) overall performance of the candidate.
 - c) passing of local supervisory committee.
3. Final in training evaluation:
 - a) The candidate must be certified in general surgery prior to applying to pediatric surgery final evaluation.

- b) Passing a written examination.
- c) Passing an oral/clinical examination.
- 4. Unsuccessful candidates will be allowed to sit for two further attempts over a period of three years from the date of completion of their training.
- 5. Successful candidates will be awarded "Fellowship in Pediatric Surgery of Saudi Arabia (FPSS)".

PROGRAM DIRECTOR

He/She should be a full time Pediatric Surgery Consultant and have served in this capacity for a minimum of five years. He/She should also be approved by the Scientific Council of the Specialty and be able to:

- 1. Demonstrate commitment to the specialty.
- 2. Show the interest, authority and commitment necessary to fulfill teaching responsibilities in order to develop, implement and achieve the educational goals and objectives of the program.
- 3. Maintain an active clinical involvement in the service of Pediatric Surgery.
- 4. Pursue continuing education in Pediatric Surgery.
- 5. Exhibit an active interest in medical research related to Pediatric Surgery.

THE TRAINER (INSTRUCTOR)

He/She should be a full time Pediatric Surgery Consultant. He/She should also be approved by the Regional Evaluation Committee, and be able to:

- 1. Demonstrate commitment to the specialty.
- 2. Show interest and commitment to fulfill teaching and technical responsibilities.
- 3. Maintain an active clinical involvement in the service of Pediatric Surgery.
- 4. Pursue continuing education in Pediatric Surgery.

DUTIES OF THE TRAINEE

As a general principle, continuity of care should be emphasized. Ideally, the Fellow should seek to follow patients from the time of the pre-admission evaluation (consultation) or the admission history/physical, through the in-hospital phase of treatment, including surgery and the follow-up visits. It is particularly important that he/she remain intimately involved with the day to day care of surgical patients in the PICU and the NICU, and attend all major surgical cases.

- The Fellow is highly encouraged to attend outpatient clinics to see as many new patients as possible, and to follow up on all patients he/she has treated in hospital or outpatient surgery.
- The Fellow is also encouraged to attend all surgical procedures of interest in other disciplines when relevant to the secondary objectives of training.
- The Fellow is expected to undertake one or more clinical or basic science research projects. This is a training requirement.
- The Fellow should attend and actively participate in the Pediatric Surgery Club meetings, and be responsible for organizing all academic activities within the department.
- The Fellow must play a major role in the teaching and supervision of the junior residents in their daily clinical work.
- The Fellow must be involved in all relevant clinical activities of the unit and run the day-to-day work of the unit.

ACCREDITATION

The program is a regional joint program. The hospital(s), which will be accredited for training, must follow rigid accreditation criteria to ensure a high standard of training; these criteria will be ensured by a committee to be formed by the Saudi Council for Health Specialties and will include:

1. The general accreditation rules for the Saudi Council must apply.
2. A minimum of two qualified consultant pediatric surgeons, with experience in teaching and commitment to carry out the training program as stipulated by the Saudi Council for Health Specialties.
3. Clinical Services:
 - a) Inpatient General Pediatric Surgery service with a minimum of ten beds per Fellow.
 - b) Outpatient service – minimum two per week.
 - c) Properly equipped OR which can cater to neonatal and critical pediatric care.
4. Curriculum-based teaching activities as approved by the Saudi Council for Health Specialties should be designed, so that each trainee will develop high quality practical and academic expertise. This should include:
 - a) Daily Ward Rounds
 - b) Weekly Grand Rounds
 - c) Monthly Journal Club

- d) Monthly Combined Pediatric Surgery – Pathology Meeting
 - e) Monthly Combined Pediatric Surgery – Radiology Rounds
 - f) Monthly Morbidity & Mortality Rounds
5. Research-oriented activities that allow the Fellow sufficient exposure and participation in research.
 6. The program must allow the Fellow to perform no less than the minimum number of procedures required for the subspecialty as follows:
 - Neonatal cases (100)
 - Important Pediatric Surgical cases (120)
 - Tumors and other similar operations (35)
 - Management of Trauma (30)
 - Other Pediatric Surgical Cases (see attached appendix for details)
 7. One Fellow will be selected per approved hospital every 3 years (depending on the requirement).
 8. An active subspecialty service, dealing with various medical disorders in the subspecialty with sufficient diversity and skills as stipulated by the training program of any particular subspecialty such as NICU, PICU, Pediatric Radiology, Pediatric Anesthesia.
 9. Other subspecialty services such as pediatric oncology, urology, trauma, etc, must be fulfilled by the Joint program.
 10. The accredited hospital(s) will be reviewed regularly by the Saudi Council for Health Specialties and accreditation will be renewed periodically.

DISCIPLINARY ACTIONS AND DISMISSAL

Disciplinary actions and dismissal from the program will be taken according to the Rules and Regulations of Saudi Council for Health Specialties and participating hospitals. Those actions should be approved by the educational committee of the training program.

APPENDIX 1 – LOG BOOK

OPERATIVE PROCEDURES	SURGEON	TEACHING ASSISTANT
SKIN/SOFT TISSUE/MUSCULOSKELETAL		
Complex wound closure		
Subcutaneous mastectomy		
Pilonidal cyst excision		
Perianal fistula		
Incision & drainage of abscess		
Removal of soft tissue foreign body		
Major excision soft tissue tumor		
Major soft tissue repair for trauma		
Other		
TOTAL SKIN/SOFT TISSUE/MUSCULOSKELETAL		
HEAD AND NECK		
Thyroglossal duct cyst/sinus		
Branchial cleft cyst/sinus		
Cystic hygroma/lymphangioma		
Dermoid/other cyst		
Thyroidectomy (any)		
Parathyroidectomy (any)		
Major tumor (head & neck)		
Tracheostomy		
Laryngeal or tracheal resection and/or reconstruction		
Other		
TOTAL HEAD & NECK		
THORACIC		
Repair Chest Wall deformity		
Resection chest wall tumor		
Excision mediastinal cyst		
Excision mediastinal tumor		
Pulmonary resection tumor, congenital malformation, infection, etc.		
Thoracotomy for trauma		
Lung Biopsy: Open		
Scope		
Decortication/pleurectomy/blebectomy: Open		
Scope		
Esophageal resection or replacement		
Esophagomyotomy		
Repair esophageal atresia and/or trachoesophageal fistula		
Patent ductus arteriosus		
Aortopexy		
Other		
TOTAL THORACIC		
DIAPHRAGM		

Repair diaphragmatic hernia		
Plication of diaphragm		
Other		
TOTAL DIAPHRAGM		
ABDOMINAL		
Antireflux procedure: Open		
Scope		
Pyloroplasty/gastric resection with or without vagotomy		
Any gastrostomy/jejunostomy: Open		
Scope		
Pyloromyotomy		
Operation for malrotation		
Repair intestinal atresia, stenosis, or web		
Intestinal resection/repair or ostomy for:		
Necrotizing Enterocolitis		
Inflammatory Bowel Disease		
Trauma		
Intestinal resection (Meckel's, Duplication, Meconium Ileus, etc.)		
Laparotomy or resection for intussusception		
Ostomy for:		
Anorectal malformation		
Hirschsprung's		
Other		
Closure/revision any ostomy		
Appendectomy: Open		
Scope		
Perineal procedure for imperforate anus		
Pull through for:		
Imperforate anus (posterior sagittal, abdominal, sacral, etc.)		
Hirschsprung's: Open		
Scope		
IBD or polyposis: Open		
Scope		
Exploratory laparotomy with or without biopsy		
Excision of omental/mesenteric cyst		
Omphalocele (any surgical repair)		
Gastroschisis (any surgical repair)		
Resection urachal remnant		
Resection omphalomesenteric duct/cyst		
Excision neuroblastoma/adrenal/other retroperitoneal tumor		
Excision sacrococcygeal teratoma		
Other		
TOTAL ABDOMINAL		
HERNIA REPAIR		

Pediatric repair inguinal hernia (unilateral or bilateral is a single procedure)		
Infant (<6 months of age) repair inguinal hernia (unilateral or bilateral is a single procedure)		
Repair umbilical hernia		
Repair ventral hernia		
Other		
TOTAL HERNIA REPAIR		
LIVER/BILIARY		

Major hepatic resection/repair:		
Tumor		
Trauma		
Other		
Lysis or adhesions		
Liver biopsy: Open		
Scope		
Liver harvest		
Liver transplant		
Cholecystectomy with or without common		
Bile duct exploration: Open		
Scope		
Portoenterostomy		
Excision choledochal cyst		
Portosystemic shunts or other operations for portal hypertension		
Pancreatic resection for:		
Trauma		
Hyperinsulinism		
Tumor		
Operations for pseudocyst		
Splenorrhaphy		
Splenectomy: Open		
Scope		
Other		
TOTAL LIVER/BILIARY GENITOURINARY		
Nephrectomy (partial or total)		
Tumor		
Trauma		
Cystic dysplasia		
Other		
Repair extrophy		
Enteric conduit		
Reconstruct cloacal extrophy		
Circumcision (OR only)		
Orchidopexy: Open		
Scope		
Orchiectomy		
Operation ofr torsion testis, appendages		
Operation for varicocele: Open		
Scope		
Procedure for intersex (vaginal reconstruction, clitoroplasty, etc.)		
Oophorectomy (partial or total)		
Hysterectomy/salpingectomy		
Repair complex laceration vagina/perineum		
Other		
TOTAL GENITOURINARY		
ENDOSCOPIC PROCEDURES		

Diagnostic thoracoscopy		
Diagnostic laparoscopy		
Cystoscopy		
Bronchoscopy		
Esophagoscopy		
Removal foreign body esophagus or trachea		
Esophagela dilatation		
Colonoscopy		
Sigmoidoscopy		
Other endoscopy		
TOTAL ENDOSCOPIC PROCEDURES		
VASCULAR ACCESS/DIALYSIS CATHETER		
Surgical placement/removal central access line		
Dialysis access insertion/removal		
Peritoneal dialysis catheter		
TOTAL VASCULAR ACCESS/DIALYSIS CATHETER		
TOTAL OPERATIVE EXPERIENCE		
NON-OPERATIVE TREATMENT OF MAJOR OR MULTISYSTEM TRAUMA		

APPENDIX II – INDEX CASES

A. INDEX CASES

1. Neonatal (100)
 - Abdominal wall defects (omphalocele, gastroschisis)
 - Sacrococcygeal teratoma
 - Neonatal ostomy
 - Malrotation
 - Diaphragmatic hernia
 - Esophageal atresia or tracheal esophageal fistula
 - Intestinal atresia, stenosis web of meconium ileus
 - Intestinal resection, repair or ostomy for NEC

2. Important Pediatric Surgical Cases (120)
 - Esophageal resection or replacement
 - Excision mediastinal cyst
 - Inguinal hernia repair - <6 months
 - Orchiopexy
 - Excision choledochal cyst
 - Procedures for imperforate anus
 - Pull-through
 - Perineal procedure
 - Prtoenterostomy
 - Procedure for intersex
 - Vaginal reconstruction
 - Clitoroplasty
 - Pulmonary resection tumor, congenital malformation, infection
 - Repair chest wall deformity
 - Pull-through Hirschsprung's disease

3. Tumors and Other Similar Operations (35)
 Cystic hygroma/lymphangioma
 Excision mediastinal tumor
 Excision neuroblastoma/adrenal/other retroperitoneal tumor
 Major hepatic resection for tumor
 Major tumor head and neck
 Nephrectomy (partial or total) for tumor
 Oophorectomy (partial or total)
4. Management of Trauma (30)
 With/without surgery

B. OTHER PEDIATRIC SURGICAL CASES

1. Appendectomy (40)
 Central venous catheter (50)
 Umbilical hernia (30)
 Inguinal hernia (100)
 Circumcision (40)

- Thoracic procedures (50)
 - including closed heart procedures (i.e., PDA)

- Head and neck procedures (30)
 Thyroidectomy
 Parathyroidectomy
 Thyroglossal duct cyst
 Brachial cleft cyst/sinus
 Cystic hygroma/lymphangioma
 Dermoid cyst
 Tumors
 Tracheostomy
 Laryngeal or tracheal reconstruction

- Endoscopy (30)
 Cystoscopy
 Bronchoscopy
 Esophagoscopy
 Colonoscopy
 Sigmoidoscopy

- Pyloromyotomy (10)
 Management of intussusception (10)
 - with/without surgery
 Splenectomy (19)
 Cholecystectomy (5)

APPENDIX III – EDUCATIONAL REQUIREMENTS

EDUCATION REQUIREMENTS

- I. Basic Knowledge

1. Physiological differences between pediatric and adult patient
2. Nutritional support of children
3. Fluid and electrolyte balances
4. Ethical considerations and consent for pediatric patients
5. Immune response and immune deficiency disease
6. Ventilatory supports ad critical care
7. Anesthetic considerations

II. General Knowledge

1. Burns in children
2. Foreign bodies
3. Vascular access
4. Coagulopathies
5. Endoscopic, laparoscopic, thoracoscopic techniques including laser surgery
6. Extra corporeal membrane oxygenation
7. Trauma principles including assessment and management guidelines

III. Specific Knowledge

1. Trauma
Trauma head, chest, abdomen, pelvis and extremities
2. Chest
 - A. Chest wall deformities
 - B. Malformation of the airway including obstructions
 - C. Congenital and acquired lesions of the trachea, bronchi and lungs including diaphragmatic hernia
 - D. Mediastinal tumors
 - E. The esophagus:
 - A. Esophageal atresia and tracheoesophageal fistula
 - B. Other esophageal malformations
 - C. Gastroesophageal reflux
3. Gastrointestinal
 - A. Lesions of the stomach
 - B. Intestinal atresia and stenosis
 - C. Malrotation
 - D. Meconium disease of infancy
 - E. Necrotizing enterocolitis
 - F. Hirschsprung's disease
 - G. Anorectal agenesis and cloacal anomalies, including anorectal continence and management of constipation
 - H. Acquired anorectal disorders
 - I. Intussusception
 - J. Alimentary duplications and Meckel's diverticulum
 - K. Inflammatory bowel disease
 - L. Gastrointestinal neoplasms
 - M. Appendicitis
 - N. Abdominal wall defects and hernias

4. Hepatobiliary disease
 - A. Biliary tract disorders and portal hypertension
 - B. Liver transplantation
 - C. Lesions of the pancreas
 - D. Lesions of the spleen

5. Renal
 - A. Developmental and positional anomalies of the kidney
 - B. Undescended testes and testicular torsion
 - C. Anomalies of the ureter urinary bladder and urethra
 - D. Vesicoureteric reflux and urinary tract infections
 - E. Hypospadias and circumcision
 - F. Intersex anomalies
 - G. Renovascular hypertension
 - H. Renal neoplasms
 - I. Vaginal atresias and imperforate hymen

6. Tumors
 - A. Hemangiomas and lymphangiomas
 - B. Neuroblastoma
 - C. Teratomas
 - D. Liver tumors
 - E. Lymphomas
 - F. Nevus and melanoma

7. Head and neck
 - A. Sinuses and Musses
 - B. Thyroid lesions and tumors
 - C. Parathyroid lesions
 - D. Torticollis

8. Gynecological disorders
 - A. Breast lesions
 - B. Ovarian lesions
 - C. Labial and vulvas lesions
 - D. Vaginal lesion and foreign bodies

9. Conjoined twins