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***History and examination in Gynecology***

***Overview and objectives***

History and examination is considered as the most important aspect of clinical practice which should be mastered by aby physician irrespective of the speciality. Ufortunately many doctors consider history taking is not more than filling a vurvey paper or data collection sheet. In fact taking history is a highly active process which requires the docors’ full attension to every word said and to full knowledge of the various disorders in the speciality of the career so when a differential diagnosis is reached the investigations which are sent aftreward are (predictive)raher than (passive). In other word the history and examination should be a a highly integrated process between the patient’s word and the doctor knowledge so the patient are seen in true prospective and sent afterward to the minimum investigation and maximum benefit investigation just to confirm or exclude the point of initial differential diagnosis which the doctor has reached while taking the history.

***Aspect of the history taking in gynecology***

As a mattar of fact history taking in gynecology is very similirar to the standards which is used in medicine however some few points are more taken or over detailed than that in medicine. Bellow are the different aspect of history and example of their significance in clinical practice which shows why we should be at highest alert during taking history

***The initial ID***

ID is abreviation of initial identification and usually referred to the small paper issued by the authorty concerned for every individual and used to identify people name, age residency and other aspect. In the same aspect initial ID is a corner stone in every history taking and involves the following

**Name**

It goes without saying why name is important in every case for any aspect in talking to any patient.

**Age**

The age is a highly important aspect in every patient in gynecology as most of gynecology disorders are somehow related to age. Heavy cycles or menorrhagia at early few cycles in young girls may be the first sign to a disorder of clotting factors like Von Will brand disease or Chrismats disease. Menorrhage after age of 40 with high parity is usually caused by adenomysosis which is defined as invasion of the myometrium by endometrial. Another example patient at 25 years have the highest rate of acute pelvic inflammatory disease while 35 years have the highest rate of endometriosis which is defined as the presence of endometrial cavity anywhere outside the uterine cavity usually on the ovary, tubes and pouch of Douglas

**Residence**

Unfortunately or address is one of the most frequently mistaken data by the student and they mention like living in AL Karada!? Al yarmook? Or even the personal address. Actually what we take is usually reprinted as examples. Dyala province in Iraq has the highest incidence of bilhariziasis. While in Basra provice has the highest rate of sickle cell trait and disease. Esophygial carcinoma has the highest incidence in north of Iraq among Kurdish people. Japan has the highest incidence of endometriosis in the world. America and Europe in general had previously the highest incidence of breast cancer. African women has low has the highest incidence of of multiple pregnancy. Accordingly when residence is taken usually we concentrate on which part of our country has come north, south middle and to mention also what disorders which occurs most in those regions.

**Ocupation or job**

As a matter of fact few disorders in gynecology arerelated to their job yet female teachers are the most women who enjoy sick leaves!? Women who works in radiation mellieu whether in reactors or x- ray department may have slightly higher incidence of mal formed fetuses or premature menopause. The infants or children who are treated by radiation for any intracranial tumor may have premature puberty or failure to start puberty. In women with Hodjkin lymphoma who have involvement of the para aortic and pelvic lymphnode are given radiation in the form of inverted (y) after laparoscopic ligation of each uterus to the ovarian fossa to avoid radiation. Otherwise all women who are exposed to all abdominal cavity technique like in advanced ovarian tumor suffere from immediate premature menopause as radiation damage follicles in irreversible manner.

**Last menstrual period date**

 Though LMP is given less attension in gynecological disorders than obstetrical practice, LMP is still important to calculate carefully for proper and accurate diagnosis of ecttopic, hydatiform mole which behaves initially like any pregnancy causing amenorrhea. In addition menstrual abnormalities like menorrhagia as well as oligo menorrhea require calculation of the LMP on dating chart.

**Blood group**

Needles to say that piece of information is one of the most important informations needed by any gynecologist and may save the the life of any patients in avoiding delay to investigate it.

***Chief complain and history of the present illnes***

Chief complain of the patient is considered as the corner stone of any physician skill as mastering it will make the famous well known doctors. The most important requirement for extracting chief complain and other information’s is the knowledge of the doctor and full awareness of the various unusual and strange cases. In history of the present illness simply all the events which have made the patient admitted to the hospital in front of you should be taken. The first sign or symptom and the doctor she has consulted. Which medications and investigations have shown. How long she used the medication before admission. Why the doctor has decided to change his opinion and transferred her to the hospital. That is simply the definition of history of the present illness. While chief complaint is simply the first sign or symptom and its duration is mentioned.

 In case the patient has done operation history of the present illness becomes the name of the operation, date, indication, any complication intra operative, or post operative and in which post operative day now she is are mentioned. For example the patient is a case of simple hysterectomy for menorrhagia resistant to medical therapy the operation was done at such history, smooth course, received one pint of blood post operative today she is in the second post operative day! The last point in history of the present illness is you are absolutely forbidden to mention the name of any Senior or doctor she has consulted. This mistake is fatal and a direct path for failure in the exam.

**Obstetrical history**

As you have learned from the previous year obstetrical history briefly we mention first the date of marriage followed by the date of every pregnancy and what has happened with regard to complications in the first, second and third trimester then the mode mf delivery spontaneous, assisted and cesarean section and there after any complication in the puerperium. In gynecological field the parity has wide implication on reaching to the true diagnosis of the primary disorder the women have. Diseases which are unlikely in women with high parity include, polycystic ovarian syndrome, endometriosis, fibroid and endometrial carcinoma. Nuns are virtually fully protected from cervical carcinoma. High parity is the most common cause of adenomyosis which is a disease predominates after the age of 40 and reluctant to any medical therapy Menorrhagia which ultimately needs hysterectomy. Previous cesarean sections may make the course of hysterectomy very difficult and injury to the urinary system with fistula formation is very common. Accordingly obstetrical history is a corner stone in the gynecological history. Finally in the context any previous pelvic surgery means a new challenge to the surgeon for the massive adhesion which could be found.

**Gynecological history**

Unfortunately this part of the gynecological history is the most mistaken part though its importance in any woman life and include the following

* Menarche is usually the first part taken in gynecological history. Premature menopause is rarely seen and may be caused by car accident, trauma and brain tumor yet rarely seen. Delayed puberty or prolonged amenorrhea after the first cycle indicates PCO. The menstrual cycle is assessed by 3 parameters cycle; which is the first day between one menstrual cycle and other, Period; which is the days spent in menstruation; loss; which represent how much total blood is lost. In normal female the cycle is 21-35 days, period is 3-7 days and loss is 30- 70 mill per cycle
* Sexual appearance in primary amenorrhea; despite primary amenorrhea is rare however always the general appearance of the patient should be evaluated infantile, feminine or male like appearance as boldness, hirsute, breast atrophy and clitorial hypertrophy
* History of contraception; in fact every woman in her life use some method of contraception. The methods used should always be asked about as they are linked to both gynecological and non gynecological
* Urinary gynecology; is the most frequently mistaken or even left unknown despite its importance and association with both gynecological and non gynecological diseases. Stress incontinences and urge incontinence are the 2 most important symptoms which should be asked about as they are associated with genital tract prolapsed and non gynecological urinary problems.
* Menopause and its associated symptoms and complications. Possibly this aspect is one of the most frequently missed part of gynecological history. While hot flushes are immediate symptom which should be looked for and treated screening later on for bone density is very important to avoid or diagnose osteoporosis.

**Medical history**

In medical history the top disease which are asked about are hypertension, diabetes and ischemic heart disease. Since those are the back bone for any safe surgery they should be well excluded since 50 % of the patients after the age of 40 are treated somehow by gynecological surgery. The presence of any high risk may make the physician choose other modalities of treatment instead of major surgery. The other groups of disorders are rheumatic, congenital heart disease which may escape detection very easily. In those is absolute contraindication to IUCD for example. Insertion of loop to such patients with later development of SBE may occur. Unfortunately apart from progressive anemia the disease run quickly yet in silent course with possible fatal effect. While liver diseases like chronic active hepatitis universally present as amenorrhea which is frequently miss treated by useless drugs which may further harm the liver like steroids or clomid. Lastly the presence of child with disease transmitted by autosomal recessive or dominant manner mean 25 or 50% of the offspring’s are affected and some of those disorders are linked to menstruation for example Von willbrand’s disease all other disorders can be diagnosed antenatally by CVS and amniocentesis. However DVT ischemic heart history and stroke remains the yop rated points that should be elecited and explored in erery patient as sometimes their presence may make any surgery is absolutely contraindicated and alternative methods are usually chosen.

**Surgical history**

In the field of gynecological practice only the pelvic surgery and possibly previous history of Cesarean section is the most important to explore. This is important as any hysterectomy in the presence of previous C/S may be such diffficult so subtotal hysterectomy may be chosen. In other situations any surgery for endometriosis may render the patient with [Froozen Pelvis] in other words no safe prcedure can be done. In such cases extra peritoneal hysterectomy is usually done by top expert surgeon. In this operation the uterus and both ovaries are removed through dissecting the pelvic peritonium that cover the pelvic wall. This will appear as (false capsule) at the end of surgery.

**Family history**

Family history usually similar to that of other specialties and stress mainly on the history of diabetes, hypertension and history of twins. In the presence of disease which are transmitted as autosomal manner are very important to explore as their transmission to the fetus is capaable to be detected by the modern CVS and amniocentesis.

***Examination in Gynecology***

In fact many aspect of gynecological history are similar to those of general history and that is why they will be referred to briefly.

**General examination**

In general the patient is examined usually while she is lying in bed for the 3 standard signs jaundice, cyanosis and pallor. The pulse is examined for the 5 standard signs rate, rhythm, regularity, character and volume. Identification of anemia and its assessment clinically is of prime importance and usually done by examination of the conjunctiva, mucous membrane of the mouth and palms. Aphthus ulcer in the angles of the mouth should be scrutinized while more important hard chance may be shown in the mouth cavity.

**Examination of the neck**

it goes without saying that thyroid disorders are intimately related to the menstrual abnormalities the gynecologist should be capable of thyroid examination. Usually thyroid is examined from behind the patient while patient is in sitting position. Any enlargement with regular or irregular texture of the thyroid should be explored.

**Examination of the chest**

In many cases the gynecologist should at least put stethoscope for heart sound and breathe sound in the form of normal vesicular breathing and normal double rhythm. Any murmur should be scrutinized especially if associated with thrill. The treatment and diagnosis should be the responsibility of physician.

**Examination of the abdomen**

Here lies up to 50% of the gynecologist responsibility in diagnosis of gynecological disorders. The abdomen is examined in the system way of observation superficial and deep palpation and identification of abnormal mass. The live in gynecology should never be enlarged as gynecological tumors associated with hepatomegally means stage VI or 4b. The patient is end stage and nothing can be done except palliative. Ascietes also is an ominous sign in ovarian and endometrial cancer and the gynecologist should master the practice of transmitted thrill and shifting dullness. On the other hand ovarian cyst if more than 5 cm in diameter is usually palpable per abdomen move usually from side to side but not in sagital plane cystic in texture and you can get bellow and above it. Fibroid are firm hard usually non mobile or slightly you can get above it but not bellow it. Bladder if distended by kicked urethra from prolapsed is usually central cystic mass which get smaller when Foley’s catheter is inserted.

**Gynecological examination**

**PV and gynecological examination** is one of hardest practice in medicine. It should never be done without a witness nurse. The use of one of family relatives is unwelcomed as she may change her saying against you later.

**Initial examination**

While the patient is lying in bed either in dorsal position the vulva is inspected for hair distribution which has inverted triangle in which the base is directed upward. Gentile palpation of the Bartholin glands in each side should be done to palpate its size and to visualize any pus coming from it orifice on the inner side of labia minora. Inguinal lymph nodes should always be palpated for any enlargement. Any ulcerative lesion on the vulva should be examined and compared to the various diseases which appear on the vulva. At last the presence of any warts should be noted and recorded.

**Examination of the cervix and vaginal fornices**

**Cusco’s** speculum or bi-valve speculum is the standard instrument which is used to visualize the cervix and vaginal fornix. Any unhealthy looking on the cervix should be recorded while the pap spatula is designed to fit on the cervical junction and rotated 360 degree so scraping from the squamou – columnar junction so the detached cells are immediately put on slide and put on special media for studying the cytology of the cervix as a national screening program in the advanced countries. The cells are studied for their size, cytoplasm to nuclear ratio and uptake of stain by nucleus. In cases of abnormal cells are found the patient become candidate for further examination by colposcopy

**Bimanual examination of the uterus**

In this most sensitive examination 2 finger of the right hand is pushed inside the vaginal canal to push the cervix upward. At the same time fingers of the left hand are used to palpate the uterus and adnexial region while being pushed upward by the right hand. The normal uterus is about 90 degree to axis of vaginal canal and accordingly called anteverted. In women with whom the uterus and vagina have the same axis the uterus is called retrovered. It should be stressed that in each gynecological disorder there exist a certain pattern of finding in the PV exam for example in endometriosis the uterus is retroverted and fixed, non mobile with variable size adnexial masses in both sides while in adenomyosis the uterus is bulky enlarged and mobile. Otherwise in each lecture you will be given the characteristics of the uterus for that disease.

**Excitation test**

This test is used in acute abdomen when there is confusion between ectopic and acute pelvic inflammatory disease. If there pain in both side then the diagnosis is acute pelvic inflammatory disease. If the patient feels pain only in one side the diagnosis is mostly ectopic. If pain is felt in both sides the diagnosis is more likely acute PID.

***Other points which are examined in Gynecology***

**Varicosity**

Various veins are highly ominous findings in any patient in gynecology. Anti coagulation are usually given before surgery and during surgery at risk of wound hematoma. The patient is given initially heparin 5000- 10000 units twice daily and changed to warfarin for 6 weeks or more after any gynecological surgery.

**Petechia and Purpura**

Petechia and purpuric spots are strongly associated with ITP or idiopathic thrombocytopenia syndrome. Doing surgery without proper assessment to this auto immune disease can lead to death of the patient on the operating theater without knowing the cause. The problem is that even with replacement of platelets pints, all are consumed by the auto antibody unless special cross match is done which is too late at the time of surgery.