

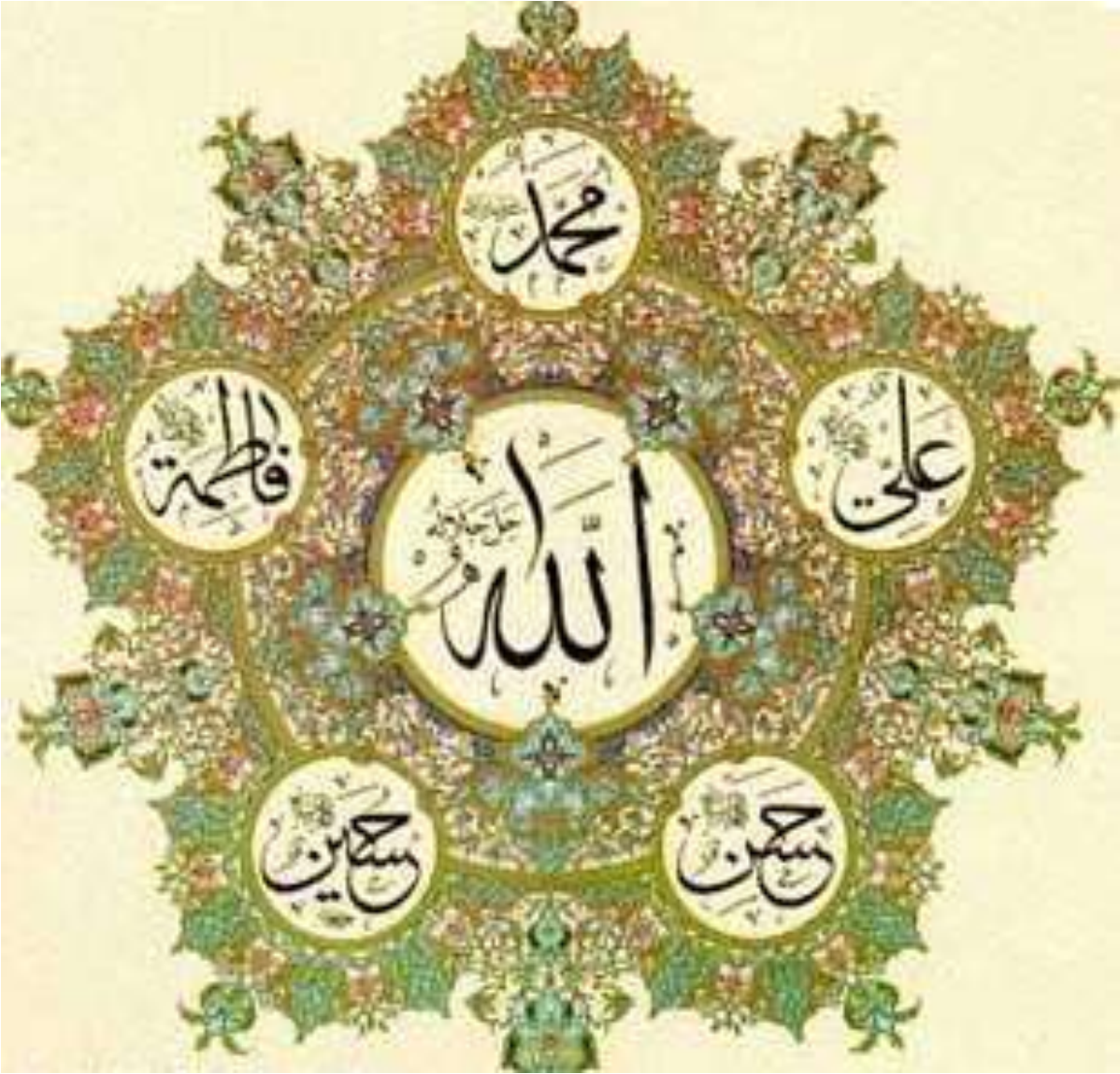
NUGGETS

GYNAECOLOGY



By: Shaheryar Ali Jafri

DEDICATED TO.....



Endometrial Malignancies NUGGETs.....

- 1) The most common cause of post-menopausal bleeding is ATROPHIC VAGINITIS and it is treated with TOPICAL ESTROGENS
- 2) other causes of postmenopausal bleeding : Endometrial hyperplasia, endometrial carcinoma, endometrial polyp, cervical ca, cervical polyp..
- 3) The gold standard for diagnosis of endometrial carcinoma = Hysteroscopy and Biopsy
- 4) Mean age for presentation of endometrial carcinoma= 54 years
- 5) Endometrial biopsy can be taken by : i) Hysteroscopic guidance ii) Pipelle iii) D&C
- 6) 1st use PIPPLE for taking endometrial biopsy but many postmenopausal women have cervical stenosis as well = so use DILATATION AND CURETTAGE for taking biopsy
- 7) For all stages of endometrial ca = TAH+BSO..... Stage2 onwards will need RADIOTHERAPY and LYMPH NODE DISSECTION AS WELL..... whereas for stage 3 and 4 = add chemo as well.
- 8) As estrogen replacement therapy is a risk factor for endometrial carcinoma so POST-MENUPASAL WOMEN SHOULD TAKE PROGESTERONE IN ADDITION TO ESTROGEN TO PREVENT THE UNOPPOSED ESTROGEN RESPONSE ON ENDOMETRIUM
- 9) Similarly POLYCYSTIC OVARIAN SYNDROME IS ALSO A RISK FACTOR FOR ENDOMETRIAL CARCINOMA = GIVE THEM PROGESTERONE
- 10) Normal thickness of endometrium = 4mm
- 11) Unopposed estrogen increases the risk for endometrial and ovarian carcinoma whereas COMBINED ORAL CONTRACEPTIVE PILLS reduce..
- 12) Simple and complex endometrial hyperplasia =Rx by Mirena IUCD, progesterone, medroxyprogesterone acetate Atypical hyperplasia = Rx by TAH
- 13) Radiotherapy is given in endometrial carcinoma to prevent recurrence BUT the most common site of recurrence = VAGINAL VALUT..... REMEMBR: radiotherapy does not increase survival

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INFERTILITY & PUBERTY NUGGETS.....

1) Failure to conceive after regular un-protected intercourse for 2 years in absence of any known reproductive pathology = INFERTILITY... 10-20% ppl will be facing this prblm

2) Whenever a couple comes with the workup of infertility = 1ST OF ALL DO SEMEN ANALYSIS.....
Before doing semen analysis make sure not to do intercourse for atleast 3 days.....

Normal parameters of semen analysis (v.v.v.v.imp) :

- i) Concentration : >2 crore/ ml
- ii) Morphology: >30%
- iii) Motility: >50%
- iv) pH: 7.2 - 7.8
- v) vol = >2ml

3) If Mild oligospermia = Do IUI (Intrauterine insemination) with washed MAN'S SPERMS via fine catheter = success rate 15-20%... during this procedure give female partner mild stimulation with FSH to mature 2-3 follicles and inseminate uterus..... IUI can also be used if there are antibodies to cervical mucus...

Scenario could be: A couple with male infertility; semen analysis shows concentration = 14 million/ml..... 25% motility.....23% morphology; all other things normal.....what is the 1st line therapy?? its IUI (intrauterine insemination)

4) if moderate to severe oligospermia = Do ICSI-IVF cycle

5) If AZOSPERMIA (no-sperms) = do SSR (SURGICAL SPERM RETRIVAL) ---->then do IVF..... if not successful = do AID (Artificial insemination by donor)

6) If a person has azospermia also investigate him for cystic fibrosis or congenital bilateral absence of vas deferenc

7) Whole process of spermatogenesis takes 74 days and head of epidydimitis stores upto 70% of sperms

8) Azospermia = no sperms ▶

Necrospermia = immotile sperms

Teratospermia = Abnormal sperms

Asthenospermia = sperms with sluggish motility

Cryptospermia = sperms not coming out of testis/ obstructed

9) If semen analysis is normal = look for female factors and 1st check whether she is ovulating or not... = MID-LEUTEAL PROGESTERONE LEVEL is used to check whether ovulation is taking place or not. (Normal MLP = >30nmol/L)

10) Most common cause of AN-OVULATION = POLYCYSTIC OVARIAN SYNDROME.... other causes include:

- i) HORMONAL PROBLEMS: Hypothalamo-pituitary-ovarian dysfunction, Thyroid disorders, Hyperprolactinemia, tumors involving pituitary or hypothalamus, Ovary not working itself
- ii) Functional: BMI >29 or <19, premature cessation of ovulation, emotional stress

11) Treatment of ovulation depends upon cause:

- i) If ovary not working: Clomiphene citrate/ Letrozole/ Laproscopic ovarian drilling
- ii) If pituitary not working: HMG (Human menopausal gonadotropin containing FSH and LH)
- iii) If Hypothalamus not working: GnRH analogue

Besides these = For rapid induction of ovulation = give HCG === leads to ovulation after 38-40 hours of injection

12) If you are using In vitro fertilization (IVF) = you take sperm from male by doing testicular biopsy.... at the same time female is given HMG (to stimulate and produce multiple follicles)....> when follicles have been matured = we need rapid induction = so used HCG now to induce rapid ovulation and collect these eggs under ULTRASOUND GUIDANCE.....

13) Side effects of CLOMIPHENE CITRATE: Ovarian hyperstimulation syndrome; Twin pregnancy; Thinning of cervical mucus; Hotflushes; weight gain; osteoporosis

14) Note: Hot flushes and vasomotor are also the early symptoms of MENOPAUSE as well... and the only indication for HRT post-menopausally is these VASOMOTOR SYMPTOMS...

15) If in infertility workup... semen analysis is normal; ovulation is normal?? what to check further???... there might be some problem with cervical mucus/ cervical mucus antibodies which may kill sperm..... this can be checked by POST-COITAL TEST / SIMMS-HUHNER TEST...

16) If semen analysis normal; ovulation normal; Cervical mucus normal...??? what to check further??? Might be some pathology with FALLOPIAN TUBES/Tubal blockade..... Do HYSTEROSALPINGIOGRAM.....

17) Tubal blockade may be due to PID or TB

PID: Chlamydia/gonorrhoea=may lead to pyosalpinx / hydrosalpinx

TB: Causes Beaded appearance and calcification of fallopian tubes

18) If Hysterosalpingiogram shows findings suggestive of tubal blockade you can do

- i) Laparoscopy ii) Ecovist iii) Rubin test
- iv) Hysteroscopy v) Salpingioscopy

Note: Dye present in HSG can also lead to spasm of proximal fallopian tube which is mis-interpreted as tubal blockade... so keep in mind while doing it

19) Gold standard from above 5 is LAPROSCOPY which is diagnostic as well as therapeutic

20) If there is tubal blockade you can use

- i) Tubal reconstructive surgery
- ii) IVF

21) So remember: IVF can be done if there is SEVERE OLIGOSPERMIA or if TUBUL BLOCKADE..... but remember: WHENEVER U R DOING IVF IN A FEMALE WITH TUBUL BLOCKADE AND SHE HAS HYDROSALPINX AS WELL= 1ST LIGATE THE FALLOPIAN TUBE AND THEN DO IVF b/c HYDROSALPINX LEADS TO FAILURE

22) Short luteal phase is due to Hyperprolactinimia = leads to INFERTILITY and SPONTANEOUS ABORTIONS.....treated by BROMOCRIPTINE.

23) 40% of infertile men have VARICOCELE.....VARICOCELE CAUSES OLIGOSPERMIA not AZOSPERMIA

24) Normal phases of puberty:

Thelarche (9.8 yr)-----> Adrenarche (10.5 y)-----> Menarche (12.8 y)

Of all these; ADRENARCHE is independant of estrogen; all other are estrogen dependant

25) If any puberty change happens <8 years of age = PRECOCIOUS PUBERTY...

26) Causes of PRECOCIOUS PUBERTY:

i) CNS TUMORS: do MRI

ii) McCune Albright syndrome = Cafe-leut spots, Polyostotic fibrous dysplasia of bones.... puberty is due to AROMATASE ENZYME which lleads to increased estrogen production by ovary...So Rx by aromatase inhibitor

iii) Granulosa cell tumor... Look for pelvic mass

CONTRACEPTIVES NUGGETS.....

- 1) The spermicidal agent used in Sponge and Gels for barrier contraception is NONOXYNOL-9
- 2) Diaphragm should be inserted 6 hours before intercourse and should be kept there 6 hours after intercourse..... if kept for long time... can lead to urinary retention
- 3) IUCD are indicated for women i) Who have atleast one child ii) Have normal menstrual cycle iii) No h/o of PID iv) In monogamous relationship
- 4) IUCD should never be used for NULLIPAROUS; woman with MULTIPLE SEX PARTNERS; H/O ECTOPIC PREGNANCY; H/O PID; GTD; immediate-postpartum or immediate-septic abortion
- 5) Mirena IUCD can be used for 5 years; have low failure rate than cu; causes hormonal side effects like acne, mastalgias, irregular periods
- 6) Cu-T can be used for 10 years; have high failure rate than mirena; no hormonal side effects; causes painful periods
- 7) Mirena can also be used for other purpose beside contraception eg HRT and aslo helps in prevention of HEAVY AND PAINFUL MENSES; but it does not controls menorrhagia caused by uterine fibroids
- 8) Other side effects of IUCD are: Bleeding; pain; PID; infection; spontaneous abortion; ectopic pregnancy; expulsion; dysmenorrhea
- 9) If estrogen component of combined oral contraceptive pills (COCP) is >50ug = it can lead to ARTERIAL AND VENOUS THROMBOSIS.
- 10) Side effects of COCP:
 - i) Mild: Nausea, mastalgia, migraine,
 - ii) Moderate: Breakthrough bleed, acne, hyperpigmentation
 - iii) Severe: Thromboembolism, Hypertension, DVT, Hepatic adenoma, Cholestasis, premature cessation of lactation, Atherogenesis.

Side effects	Protective effects
Venous thromboembolism	Ovarian cysts and cancer
CVS	Endometrial cancer
Stroke	Benign breast disease
Increase triglycerides	Dysmenorrhea
Cholestasis	Anemia
DM	
Hypertension (Na and Water retention)	

- 11) As COCP can cause PREMATURE CESSAION OF LACTATION= they should never be used in LACTATING WOMEN.....BUT the contraceptive of choice in LACTATING WOMEN IS PROGESTERONE

ONLY PILL (MINI-PILL).... although BREASTFEEDING IS NATURAL CONTRACEPTIVE but remember:: Breastfeeding prevents ovulation only for 1st 6 months.... usk baad beshak mother jitni dair tk feed kraye ovulation ho ge... so POP would be better choice to use for them.... (uw vol4 page=22)

12) Although failure rate of POP is high as compared to COCP ; but it is better contraceptive choice for i) Breastfeeding women ii) Old age (>40 years) iii) Patients with CVS risk factors eg smoker, diabetic

13) Progesteron only contraceptive methods include : POP, DMPA, Implanon, Mirena, pLAN-B (Levonogestrel)

14) Implanon contains 68mg Etonogesterel which is given sub-dermally after local anasthesia and gives effective contraception for 3 YEARS.

15) A couple having sexual intercourse and CONDOM BURSTS / UNPROTECTED unplanned sexual intercourse=: What to do now?..... use EMERGENCY CONTRACEPTION (POST-COITAL CONTRACEPTION) which include

i) Mechanical (insert copper-T iucd within 5 days)

ii) Hormonal (PLAN B= Levonogestrel 0.75mg tab.... 1 goli abi and 1 goli 12 hours baadbut both tabs should be given if time frame is <120 hours)..... U WORLD VOL4 PAGE = 55

iii) Mifepristone (RU-486)... 10mg SINGLE DOSE WITHIN 72 hours

16) Methods of terminal contraception include VASECTOMY in males and FEMALE STERLIZATION..

17) Methods of female sterlization include: Fallopian tube Clips, Rings, Tubul Ligation, Electro-cautry, Essure, Chemical Quinacrine....

18) All female methods of sterlization can be done by Laproscopy/Mini-laprotomy in general anasthesia but ESSURE and Quinacrine can be done under Local.

19) VASECTOMY can be done under LOCAL ANASTHESIA and include: Clips, Ligation, Excision, Sclerosing agents, Non-scalpal vasectomy

20) VASECTOMY is most effective mean of contraception b/c it has very low failure rate i.e 0.02/HWY..... but immediately after doing vasectomy= there are still sperm in the genital tract and those sperms get rid of the body after atleast 12 ejaculations so couple should use barrier or other methods for 3 months atleast after vasectomy.... and complete vasectomy is said if 2 CONSEUCTIVE SPECIMENS ARE FREE OF SPERMS....

21) The most common complication of vasectomy is HEMATOMA others are: i) Sperm granuloma ii) Anti-sperm antibodies iii) Failure after long time

**LIVE LIKE MUHAMMAD (S.A.W.W) & ALI (A.S)
DIE LIKE HUSSAIN (A.S)**

☺ STAY BLESSED ☺

**FROM: DR. SHAHERYAR ALI JAFRI
(AIMC)**

SHAHERYAR