SEMINAR ON: ABORTION:

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ICON

## **ABORTION**

Abortion is termination of a pregnancy by

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the removal or expulsion from the uterus, of a fetus or embryo before it is viable(20/28wks) or <500g/1000g. importance:
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- 1.It is an important cause of bleeding during pregnancy.
- 2.It is one of the five leading causes of maternal death in developing world.

## **CLASSIFICATION**

- By occurrence, it could be:
- 1.Induced abortion
- 2.Spontaneous abortion1.induced.
- -it results from medical or surgical intervention that cause abortion.
- -it could be: a)unsafe b)safe
- -unsafe abortion is characterized by:
  - lack or inadequacy of skill
  - hazardous technique
  - unsanitary facilities.

## UNSAFE ABORTION

- it account for the majority of proportion of abortion and is cause of considerable maternal mortality and morbidity.
  - it is related to unwanted pregnancy and unawareness of reproductive physiology by women.
  - =So, it can be prevented by:
    - -provision of contraceptive service.
    - -making woman knowledgeable about her rep.physiology.

Of the 205 million preg/year

42 million are abortion/year globally

with 20 million of those performed unsafely,

which claim about 700,000 women/year and cause hundred to thousands disabilities

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• Induced abortion can be also:

#### A. Therapeutic abortion,

- 1.wn performed to save life of the pregnant woman.
- 2.Prevent harm to the womans physical and mental health.
- 3. Significant disorder of the fetus that is incompatible with life.

4. Selectively reduce the no of fetuses to lessen health risks associated with multiple pregnancy

#### B. Elective (voluntary) abortion

wn performed at the request of the woman for non-medical reason (eg.unwanted-unsupported preg)

#### 2.spontaneous abortion

- Is unintentional expulsion of fetus/embryo before 20/28 weeks of gestation.
- It implies delivery of all or any part of the products of conception.

## **ETIOLOGY**

- An abnormal karyotype is present in approximately 50% of spontaneous abortions occurring during the first trimester.
- -The incidence decreases to 20-30% in secondtrimester losses and
- -to 5-10% in third-trimester losses.

Other causes <u>include infection</u>, <u>anatomic</u> <u>defects</u>, <u>endocrine factors</u>, <u>immunologic</u> factors, and maternal systemic diseases.

#### A )Morphologic and Genetic Abnormalities

- Aneuploidy (an abnormal chromosomal number) is the most common genetic abnormality, accounting for at least 50% of early spontaneous abortions.
- monosomy X or Turner's syndrome is the single most common aneuploidy, comprising approximately 20% of these gestation.
- As a group, the autosomal trisomies account for over half of aneuploid losses, with trisomy 16 being the most common.

#### **B)MATERNAL FACTORS**

1. systemic disease

a)infection: T. pallidum

C.trichomatis

N.gonorrheae

HSV

CMV etc

#### b)other disease

-hyperthyrodism

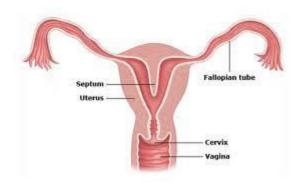
-DM

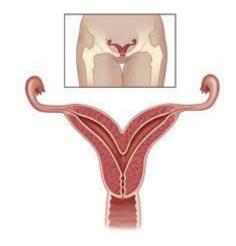
- HTN

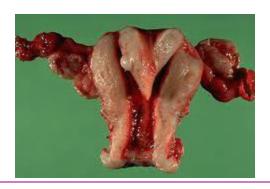
-renal disease

#### 2) UTERINE DEFECTS

- -congenital anomalies that distort or reduce the ut cavity.(septate,bicornuate)
- -DES related anomaly. (T. shaped, hypoplastic ut)
- -acquired anomaly. (myomas)
- -Asherman's syndrome









septate

bicornuate

#### 3)IMMUNOLOGICAL DISORDERS

-bld group incompatibility

-Rh

-HLA (if similar ....insufficient recog. by mothers)

#### 4)MALNUTRIATION

= severe one malnutrition has been associated to spontaneous losses.

#### C) TOXIC FACTORS

-radiation

-antineoplastic drugs

-nicotine

-alcohol.....embryotoxic

## D) TRAUMA

- direct or indirect trauma

## A) threatened Abortion

- -bleeding of intrauterine origin before 20/28wks
- -not yet severe enough to terminate preg
- -cervix is closed
- -there can be lower abdominal pain
- -preg. may be continued

## B)Inevitable Abortion

- -bleeding from intrauterine origin
- -cervix open
- -usu. With crampy lower abdominal pain
- -conception has not yet expelled
- -abortion is inevitable...no chance to salvage.

#### C)Incomplete abortion

- -the product of conception partially passed
- -but portion of some product retained in the ut
  - (chorionic tissue)
- -cervix remain open
- -cramps are usu. Present
- -bleeding often persistent and severe

## D) Complete abortion

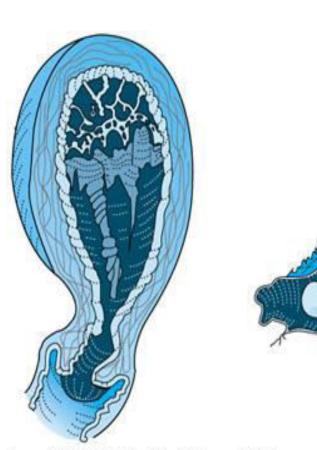
- -the entire conceptus passed
- -vaginal bleeding stops or a slight bleeding may continue for a short time.
- -cervix closes.
- -uterus is small for gestational age and firm
- -pain usu.ceases after preg .traversed the cervix

#### E)Missed abortion

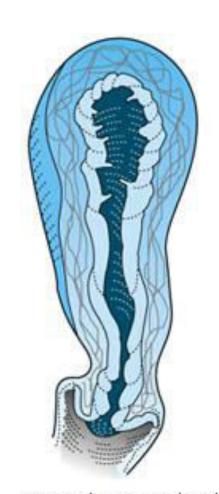
- -retention of a dead fetus for several wks
- -brownish vaginal discharge may be present
- -preg. Symptoms disappear(m.s, b.t, abd. dist
- -small for gestational age uterus
- -normal rxn of ut . to dead fetus is expulsion
- -but for unexplained reason this may not occur.

(possibly ...normal progestrone continue while estrogen level fall....which may reduce ut contra

# FIG. 1 INCOMPLETE AND COMPLETE ABORTION RESPEC.









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## LABORATORY FINDINGS

- A) -CBC
- -both WBC count and sedimentation rate increased( due to loss of bld)
- B)-hCG level
- C)-ultrasound:gestational sac normal/abnormal
  - -embryo dead/alive
  - -retained tissue
  - -FHR

## RECURRENT ABORTION

 is defined as 2 to 3 or more consecutive pregnancy losses before 20/28 weeks of gestation

Approximately 1% of women are habitual aborters

#### SEPTIC ABOTION

- Is manifested by:
  - -fever
  - -malodorous vaginal discharge
  - -pelvic and abdominal pain
  - -cervical motion tenderness
  - -peritonitis and sepsis...

- =Is determined by:
  - -duration of preg.
    - -experience of physician
    - -the available facilities

#### A) SUCTION CURETTAGE

-safest and more effective for <=12 wks

-with dilatation of cervix and local anaesthesia

-with -ve pressure of 30-50mmHg

Adv. Over surgical curettage

-empties the ut rapidly

-minimize blood loss

-reduced ut perforation

Complication very low

-infection <1%

-excessive bleeding<2%

-ut perforation<1%

-death 1/100,000

#### **B) SURGICAL CURETTAGE**

- Used in absence of suction curettage.
- -blood loss
- duration of surgery
- -damage to uterus or cervix and
- -uterine adhesion is ...... much more

#### C) MEDICAL

:drugs such as:

- -misoprostol
- -mifepristone

- methotrexate

#### Adv.

- -noninvasive
- -lack of risk from general anaesthesia
- -no infertility secondary to scar.

## DISADY.

- cramps
- Bleeding, if there is incomplete expulsion
- Failure to evacuate

nausea

## **COMPLICATION OF ABORTION**

- hemorrhage during or following abortion
- sepsis....shock
- infection
- asherman's syndrome
- infertility
- ut .perforation... fistula with bowel, bladder and IPB

## **PREVENTION**

- Early obs. Care
- Rx .of maternal causes such as HTN, D.M, etc
- Protect preg. Women from env'tal hazards.

cause	diagnosis	treatment
Genetic error	Obtain a 3-generation pedigree and karyotype of both parents and any previously aborted material	Artificial insemination by donor, embryo transfer, preimplantation diagnosis, or prenatal testing on subsequent conceptions.
Anatomic abnormalities of reproductive tract	Perform hysterosalpingogram or hysteroscopy.	Uterine operation: myomectomy. Cervical cerclage ,reconstruction of cervical isthmus.
Hormonal abnormalities	studies for T <sub>4</sub> and TSH, serum progesterone or endometrial biopsy, glucose tolerance test.	Thyroid replacement, progesterone or clomiphene citrate, diabetic diet and/or insulin, as indicated.
Infection	cervical cultures for <i>Chlamydia</i> and gonorrhea,	Approriate antibiotics.
Autoimmune disease	Evaluate blood pressure and kidney function, check for lupus anticoagulant and anticardiolipin antibody.	aspirin and heparin
Exogenous agents	Patient history and/or drug screen.	Discourage smoking, alcohol, and recreational drug use
Immunologic	Tosting not readily available	Treatment under investigation

# FOLLOW-UP CARE AFTER INDUCED ABORTION

- Rh-ve mother should be immunized
- $\bullet$  If there is any bleeding and temperature  $\Delta$
- any psychological disturbance
- Pelvic examination
- She should avoid intercourse and tampons for at least for 2 wks
- Effective contraception should be available.

## THANK You!

