



Antenatal Care

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Outlines

Definition of ANC

Goals

ANC visits

Common problem

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Nutritional supplements



Definition of Antenatal care

comprehensive health supervision of a pregnant woman before delivery

Or it is planned examination, observation and guidance given to the pregnant woman from conception till the time of labor.



Goals

To reduce maternal and perinatal mortality and morbidity rates

To improve the physical and mental health of women and children

Schedule for Antenatal Visits:

The first visit or initial visit should be made as early in pregnancy as possible.

Return Visits:

Once every month till 28 w.

Once every 2 weeks till the 36 w

Once every week, till labor.

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graph TD; A[Assessment] --- B[History]; A --- C[Examination]; A --- D[Investigation]
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Assessment

History

Examination

Investigation



History

Personal history

Family history

Medical and surgical history

Menstrual history

Obstetrical history

History of present pregnancy

Physical Examinations

Height of over 150 cm indication of an average-sized pelvis

The approximate weight gain during pregnancy is 12 kg.; 2kg in the first 20 weeks and 10 kg in the remaining 20 weeks (1.5 kg per week until term).



Symphysis–fundal height should be measured and recorded at each antenatal appointment from 24 weeks

Fetal presentation should be assessed by abdominal palpation at 36 weeks.



Fetal heart sound is heard by sonicaid as early as 10th week of pregnancy.

Fetal heart sound is heard by Pinard's fetal stethoscope after the 20th week of pregnancy.



Investigations(in clinic):

Urine should be tested for sugar and protein.

Health education during the First trimester

Physiological changes during pregnancy

Weight gain

Fresh air and sunshine

Rest and sleep

Diet

Daily activities

Exercises and relaxation

Hygiene

Teeth

Bladder and bowel

Sexual counseling

Smoking :

Medications

Infection

Irradiation

Occupational and environmental hazards

Travel

Follow up

Minor discomforts

Signs of Potential Complications



Common Discomforts during Pregnancy :

Urinary frequency

RELIEF MEASURES:

Decrease fluid intake at night.

Maintain fluid intake during day.

Void when feel the urge.



Fatigue

RELIEF MEASURES:

Rest frequency.

Go to bed earlier.



Sleep difficulties

RELIEF MEASURES:

Rest frequency

Decrease fluid intake at night

Ptyalism (excessive salivation)

RELIEF MEASURES:

Perform frequent mouth care.

Chew gum.

Decrease fluid intake at night.

Maintain fluid intake during day.

Nausea and vomiting

most cases of nausea and vomiting in pregnancy will resolve spontaneously within 16 to 20 weeks.

that nausea and vomiting are not usually associated with a poor pregnancy outcome.

non-pharmacological:

ginger

P6 (wrist) acupressure

pharmacological:

antihistamines.



THE NATURAL CHOICE FOR NAUSEA RELIEF



Nausea and vomiting

RELIEF MEASURES:

Avoid food or smells that exacerbate condition.

Eat dry crackers or toast before rising in morning.

Eat small, frequent meals.

Avoid sudden movements. Get out of bed slowly

Breathe fresh air to help relieve nausea.



Heartburn

RELIEF MEASURES:

Eat small, more frequent meals.

Use antacids.

Avoid overeating and spicy foods.



Dependent edema

Avoid standing for long periods.

Elevate legs when laying or sitting.

Avoid tight stockings.

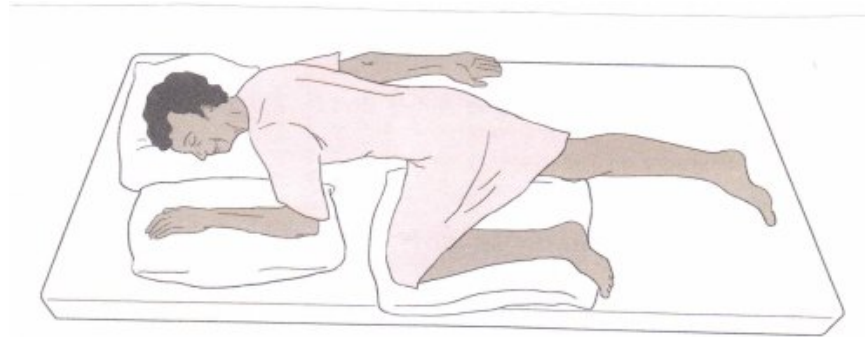
Varicosities

Rest in sims' position.

Elevate legs regularly.

Avoid crossing legs.

Avoid long periods of standing





Hemorrhoids

RELIEF MEASURES:

Maintain regular bowel habits.

Use prescribed stool softeners.

Apply topical or anesthetic ointments to area.

Constipation

RELIEF MEASURES:

Maintain regular bowel habits.

Increase fiber in diet.

Increase fluids.

Find iron preparation that is least constipating

Backache

RELIEF MEASURES:

Wear shoes with low heels.

Walk with pelvis tilted forward.

Use firmer mattress.

Perform pelvic rocking or tilting

Leg cramps

RELIEF MEASURES:

Extend affected leg and dorsiflex the foot.

Elevate lower legs frequently.

Apply heat to muscles.



Faintness

RELIEF MEASURES:

Rise slowly from sitting to standing.

Evaluate hemoglobin and hematocrit.

Avoid hot environments



Screening



1-Gestational age assessment

Ultrasound Screening Guideline

2-Screening for fetal anomalies

New The 'combined test' (nuchal translucency, beta-human chorionic gonadotrophin, pregnancy-associated plasma protein-A) should be offered to screen for Down's syndrome between 9 weeks to 11 weeks .

3- Screening for gestational diabetes

New risk factors for gestational diabetes :

body mass index above 30 kg/m^2

previous macrosomic baby weighing 4.5 kg or above

previous gestational diabetes (refer to 'Diabetes in pregnancy

family history of diabetes (first-degree relative with diabetes)

family origin with a high prevalence of diabetes.



4-Screening for hypertension in :pregnancy

Chronic hypertension

Gestational hypertension

Preeclampsia / eclampsia

5- Anaemia

Screening should take place early in pregnancy (at the booking appointment).

at 28 weeks when other blood screening tests are being performed.

At 36 weeks.



Normal range:

11 g/100 ml at first contact and
10.5 g/100 ml at 28 weeks) should
be investigated and iron
supplementation considered .

6-Blood grouping and red-cell alloantibodies

Women should be offered testing for blood group and rhesus D status in early pregnancy.

To give anti-D at 28 weeks and post delivery if the baby (+)

7- Hepatitis B virus

Serological screening for hepatitis B virus should be offered to pregnant women so that effective postnatal interventions can be offered to infected women to decrease the risk of mother-to-child transmission.



8- Asymptomatic Bacteriuria

Women should be offered routine screening for asymptomatic bacteriuria by midstream urine culture early in pregnancy.

Identification and treatment of asymptomatic bacteriuria reduces the risk of pyelonephritis.

9- Rubella

Rubella susceptibility screening should be offered early in antenatal care to identify women at risk of contracting rubella infection and to enable vaccination in the postnatal period for the protection of future pregnancies.



Nutritional Supplements



Folic Acid

Start before conception and throughout the first 12 weeks.

reduces the risk of having a baby with a neural tube defect (for example, anencephaly or spina bifida).

The recommended dose is 400 micrograms per day.

Vitamin D

New women at greatest risk are following advice to take this daily supplement. These include:

women who have limited exposure to sunlight, such as women who are predominantly housebound, or usually remain covered when outdoors

women who eat a diet particularly low in vitamin D, such as women who consume no oily fish, eggs, meat, vitamin D-fortified margarine or breakfast cereal

women with a pre-pregnancy body mass index above 30 kg/m^2 .



Iron

Iron supplementation should be offered routinely to all pregnant women. It does benefit the mother's and the baby's health but may have unpleasant maternal side effects.

Guidelines for standard Antenatal Care



1 –Pregnancy Trimesters(Cut off)

First trimester from conception- 13 weeks
(weeks

Second trimester)13+1 -72

- Third trimester)27+1 – 40 (weeks

ANC at least four-visit schedule

1st trimester:

I. Booking visit

2nd trimester:

II. 16 weeks gestation

III. 18-22 weeks gestation

IV. 24-28 weeks gestation

3rd trimester:

V. 32 weeks gestation

VI. 36 weeks gestation



The Risk Approach

The central purpose of antenatal care is early detection of high risk pregnancies,

Arrange for their skilled care;

Simultaneously continuing to provide appropriate care to all expectant mothers.

High Risk Pregnancies

Elderly Primigravida.

Short statured primigravida (below 140 Cm).

Malpresentation (breach, transverse lie etc.).

Antepartum haemorrhage, threatened abortion.

Pre-eclampsia and Eclampsia.

Anaemia (Hb% 50% or below).

Twin (multiple) pregnancy, Hydramnios.

Previous still birth, Intra uterine death or manual removal of placenta.

Elderly grand multipara.

Post maturity (Prolonged pregnancy, 14 days or more of E.D.D.).

H/O previous Caesarian section or Instrumental interference.

Pregnancy associated with general diseases (Kidney including persistent UTI, diabetes, Cardiovascular diseases, Tuberculosis, Liver disease, etc.).

Post Natal Care

Objectives:

- (i) To prevent complications of post-partal period,
- (ii) To restore the health of the mother to the optimum,
- (iii) To check adequacy of breast feeding,
- (iv) To provide basic health education to the mother and family.

Post Natal Care cont'd

Puerperal Sepsis

This is the infection of the genital tract occurring within three weeks after delivery.

This can be recognized by:

rise in body temperature,

increased pulse rate,

foul smelling lochia,

pain and tenderness in the lower abdomen, etc.

Puerperal sepsis can be prevented.

Post Natal Care Cont'd

Thrombophlebitis:

Infection of the veins of the leg and pelvis.
susceptible mothers (obese, presence of varicose veins, past H/O such complications)

This may be associated with pale, tender swollen legs, with or without fever.

Tenderness elicited by **dorsiflexion** of the foot (Homan's sign **!!??**) in the calf muscle is an early sign of deep vein thrombosis of the legs.

Post Natal Care Cont'd

Secondary Hemorrhage:

Bleeding per vagina occurring any time from six hours after delivery to the end of puerperium (six weeks)

Called secondary haemorrhage; which may be due to the retained placenta or membranes.

Post Natal Care Cont'd

Others:

Urinary tract infection

Mastitis

are the other common post partal infections which should be kept in mind

In addition to the possibility of locally endemic diseases whenever there is post partal fever.

Post Natal Care Cont'd

The management of complications is under the preview of secondary care.

Only symptomatic treatment with supportive measures should be attempted at the primary care level.

If such complications are detected or reported either in the home or health centre, the mother should be referred to the specialist without losing much time,

Transport arrangements made through the health centre if required.

