October/ 2019

Department of Health Research
Ministry of Health and Family Welfare, Government of India

INDIAN COUNCIL OF MEDICAL RESEARCH
Serving the nation since 1911

Standard Treatment Workflow (STW) for
ANTE-NATAL MANAGEMENT OF NORMAL PREGNANCY

FIRST VISIT (PREFERABLY IN FIRST TRIMESTER)

ASK
- Age
- LMP
- Parity & obstetric history
- Any complaints especially excessive nausea & vomiting/ bleeding PV
- H/o medical illness : diabetes, hypertension, cardiac problem, epilepsy or any other chronic illness
- Consanguinity, multiple pregnancy
- H/o blood transfusion and H/o prior surgical intervention
- Personal history : tobacco/ alcohol intake
- Family history : diabetes, hypertension, genetic disorders/ congenital problems, multiple pregnancy, infections including tuberculosis

EXAMINE
- Height, weight
- Calculate BMI
- Pallor, Jaundice, Pedal edema
- Pulse, BP, RR, temperature
- Thyroid
- Breast
- Respiratory and CVS examination
- P/A examination, P/S and P/V examination

If woman presents with bleeding per vaginum do P/A & P/S to confirm amount of bleeding & rule out local causes. All such cases to be referred to CHC or higher centre

INVESTIGATIONS
ESSENTIAL TESTS
- Hemoglobin
- Urine R & M
- ABO & Rh grouping

DESIRABLE TESTS
- VDRL/ RPR
- HIV
- HBsAg
- DIPSI test/ WHO OGTT for diagnosis of GDM
- TSH in high risk cases (BOH, goiter, obesity or residing in iodine deficiency prone areas)

OPTIONAL TESTS*

Aneuploidy screen* by USG & double marker

DO
- UPT if in doubt
- Fill up MCH protection card or ANC card, make entry on RCH portal & generate RCH number (in public sector)
- Give filled MCH protection card & safe motherhood booklet to woman
- Give Tab Folic Acid daily
- Give first dose of tetanus toxoid

SECOND VISIT (SECOND TRIMESTER)

ASK
- Any complaints since last visit
- Quickening and/ or fetal movements
- Adherence to medications

EXAMINE
- Weight
- Pallor
- Pedal edema
- Pulse, BP in sitting position
- P/A examination for fundal height

INVESTIGATIONS
ESSENTIAL TESTS
- Hemoglobin
- Urine albumin

DESIRABLE TESTS
- USG (Level II between 18-20 weeks for gross congenital malformations)
- DIPSI/ WHO OGTT if >24weeks & at least 4 weeks have elapsed after 1st test

OPTIONAL TESTS*

Quadruple test as per availability

*Should be performed only if adequate counselling facilities are available

DO
- IFA tablet one (if Hb >11g%) or twice (if Hb <11g%) daily with water or lemon juice
- Calcium carbonate 500 mg with vitamin D 250 mcg tablet twice daily with meals.
- Calcium Carbonate and IFA not to be given together
- Single dose of Albendazole 400mg
- Ensure compliance for investigations and treatment
- Discuss birth preparedness
- Give second dose Tetanus Toxoid at least four weeks after first dose

THIRD (28 – 34 WEEKS) AND FOURTH VISIT (36 - 40 WEEKS)

ASK
Same as above

EXAMINE
- Same as above
- Auscultate FHS
- Measurement of abdominal girth and Symphysiofundal Height

INVESTIGATIONS
- Hemoglobin
- Urine albumin
- Optional USG for fetal growth and liquor

DO
- Continue IFA and calcium tablets and ensure compliance
- If non compliant or Hb < 9g% give parenteral iron sucrose therapy (not > 200mg at one time & not > 3 times a week) and refer patient with Hb < 7g% to higher centre
- Refer to higher centre if any discrepancy between fundal height and period of gestation

DANGER SIGNALS FOR PATIENT TO REPORT TO HEALTH FACILITY
- Fever
- Persistent vomiting
- Abnormal vaginal discharge
- Palpitations, easy fatigability and breathlessness at rest and/ or on mild exertion.
- Generalized swelling of the body/ puffiness of the face
- Vaginal bleeding
- Decreased or absent fetal movements at > 28 weeks gestation
- Leaking of watery fluid per vaginum (P/V)
- Severe headache/ blurring of vision/ convulsion
- Passing lesser amounts of urine and/ or burning sensation during micturition
- Itching all over the body

HIGH RISK PREGNANCY
- Any H/o medical illness, previous caesarean section, past obstetric mishap or congenital malformation
- Past H/o PPH
- Age > 35 years or < 19 years or parity > 4
- Malnourished (BMI < 18.5 kg/m^2 or > 30 kg/m^2)
- Hemoglobin < 7g%
- BP > 140/90mm Hg on 2 occasions 6 hours apart
- APH
- Discrepancy between fundal height and period of gestation > 4 weeks
- GDM/ overt DM
- Multiple pregnancy
- Malpresentation at term
- Previous uterine surgery

* High risk pregnancy to be delivered at district hospital/medical college
* Preferably to have antenatal care also at these centres

COUNSELLING AT ALL LEVELS FOR :
- Timing and place of next ANC visit based on presence or absence of risk factor
- Rest, nutrition, balanced diet and exercise
- Counselling for HIV testing
- Danger signs
- Institutional delivery
- Birth preparedness
- Early & exclusive breastfeeding for six months

BIRTH PREPAREDNESS MUST INCLUDE IDENTIFICATION OF THE FOLLOWING :
- Facility for delivery
- Support persons
- Birth companion
- Means of transport in emergency
- Blood donors (if required in emergency)

ASSESSMENT OF FUNDAL HEIGHT & ITS CORRELATION WITH GESTATIONAL AGE

At 12th week : Just palpable above the symphysis pubis

At 16th week : At lower one-third of the distance between the symphysis pubis and umbilicus

At 20th week : At two-thirds of the distance between symphysis pubis and umbilicus

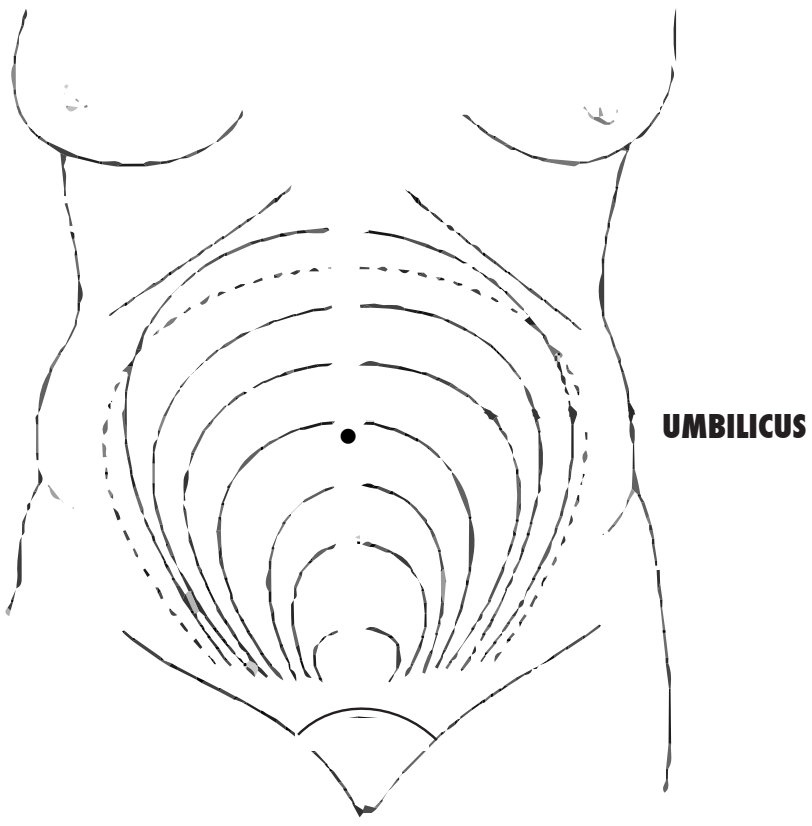
At 24th week : At the level of umbilicus

At 28th week : At lower one-third of the distance between the umbilicus and xiphisternum

At 32nd week : At two-thirds of the distance between the umbilicus and xiphisternum

At 36th week : At the level of xiphisternum

At 40th week : Sinks back to the level of the 32nd week, but the flanks are full, unlike that in the 32nd week



COUNSELLING IS AN IMPORTANT ADJUNCT TO MANAGEMENT

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal (**stw.icmr.org.in**) for more information.