

DOCTOR  
IS MY BABY  
NORMAL?



NUCLEUS DIAGNOSTICS  
PRENATAL SCREENING PROGRAM

**NDPSP**

GUIDE TO PATIENT FOR  
PRENATAL SCREENING

## DOCTOR IS MY BABY NORMAL ?

This is the most frequently asked question by pregnant women to every gynaecologist in OPD. Till date Sonography is the most widely used tool to diagnose structural defects in baby.

## IS SONOGRAPHY ENOUGH TO SAY THAT THE BABY IS NORMAL ?

The answer is **NO**.

## WHY ?

Because in sonography we are not evaluating chromosomal abnormality (aneuploidy) in developing baby.

Chromosomal abnormality is the most hazardous disease to cause severe mental/physical abnormalities in baby.

Trisomies (that means presence of extra chromosome in cell) is a common condition of chromosomal abnormality found in pregnant women. Most common trisomies are Down's syndrome (Trisomy 21), Edward's syndrome (Trisomy 18) and Patau's syndrome (Trisomy 13).

## WHAT ARE THE CHANCES THAT I WILL HAVE A BABY WITH ONE OF THESE CONDITIONS?

Every pregnancy carries a risk of having a baby with chromosomal abnormalities.

Here is a table showing relation between mother's age and chances of baby having commonest chromosomal abnormality, Down's syndrome.

| Mother's age | Chances of Down's syndrome   |
|--------------|------------------------------|
| 25 yrs.      | 1 in 1250 mother is affected |
| 30 yrs.      | 1 in 840 mother is affected  |
| 35 yrs.      | 1 in 356 mother is affected  |
| 40 yrs.      | 1 in 94 mother is affected   |
| 45 yrs       | 1 in 24 mother is affected   |

## WHAT WE UNDERSTAND FROM ABOVE TABLE ?

As age of mother increases chances of having chromosomally abnormal baby is increases. However recent research tells us that 80% of Down's syndrome babies are born to mother under age of 35 yrs. So it is important to conduct prenatal screening in all pregnant women.

## HOW DO WE DETECT CHROMOSOMAL ABNORMALITY IN CHILD?

You can do prenatal screening test to identify women having high risk of chromosomal abnormality so that they can be offered a confirmatory diagnostic test. Prenatal screening is **routine test recommended for all pregnant women** as most of the mothers giving birth to Down's syndrome child do not have family history and are less than 35 years old.

## WHEN CAN I DO THE PRENATAL SCREENING TEST ?

You can do Prenatal Screening test in third month of pregnancy (first trimester screening test) and fifth month of pregnancy (second trimester screening test).

## WHAT IS FIRST TRIMESTER SCREENING ?

First Trimester Screening involves taking a sample of your blood between 11 to 13 weeks of pregnancy and checking levels of biochemical markers (PAPP-A & free B-hCG). This is combined with an ultrasound done in the same period called NT scan (Nuchal Translucency scan). This test is called a combined Screening test and detects about 82-87% of Down syndrome pregnancies.

## WHAT IS SECOND TRIMESTER SCREENING TEST?

Second Trimester Screening involves taking a sample of your blood between 15 to 20 weeks of pregnancy and checking levels of biochemical markers (AFP, Total HCG, Inhibin-A & Unconjugated estriol). This is combined with sonography report done in the same period. This test detects about 81 % of Down syndrome pregnancies.

## WHAT DO THE RESULTS OF THE PRENATAL SCREENING MEAN?

The results of Prenatal Screening are either low risk, intermediate risk or high risk. Low risk indicates low chances of having chromosomally abnormal child. This will prevent further invasive testing. Low risk of chromosomal abnormality does not completely rule out the possibility of pregnancy with chromosomal abnormalities.

Intermediate risk and high risk patients are advised to undergo confirmatory invasive test.

## HOW DO WE GET HIGH ACCURACY RATE ON SCREENING TEST?

If we combine first and second trimester screening tests, the detection rate increases up to 96 %.

## WHAT KIND OF INVASIVE TESTS ARE AVAILABLE?

If your Prenatal Screening report suggests high risk for having baby with chromosomal abnormality, you may be advised one of the following options by your doctor:

- 1) Amniocentesis (withdrawing small amount of fluid surrounding baby) Or
- 2) Chorion Villus Sampling. (withdrawing some placental tissue) These tests are confirmatory tests.

## WHY NOT DIRECTLY DO A CONFIRMATORY INVASIVE TEST?

You can do a direct confirmatory test to be 100% sure. However, as both these tests are invasive, they carry a risk of miscarriage and can cause defect in baby. Screening tests therefore help ensure that the invasive tests are done only for the high risk patients.

## WHERE CAN I DO THE PRENATAL SCREENING TEST?

You should do this test at centres that follow the Fetal Medicine Foundation (FMF), UK guidelines. This ensures reliable results based on findings from extensive research coordinated by the Fetal Medicine Foundation, (UK). Nucleus Diagnostics has fetal medicine foundation accredited Radiologist to perform these screening tests.

**PREVENTION is the CURE,  
Especially when disease has NO CURE.**

Following Prenatal Screening Tests are available at **Nucleus Diagnostics** depending on the duration of pregnancy:

## NUCLEUS DIAGNOSTICS PRENATAL SCREENING PROGRAM (NDPSP)

NDPSP Package 1 : (Done during 3rd month)

NDPSP Package 2 : (Done during 5th month)

NDPSP Package 3 : (Done during 6th month)

Further information please contact your doctor.





NUCLEUS DIAGNOSTICS  
PRENATAL SCREENING PROGRAM

**NDPSP**

- 3T MRI
- 3D / 4D Sonography
- CT Scan
- Sonography
- Elastography
- Color Doppler
- Digital X-Ray
- TMT
- X-Ray Procedures
- 2D Echo
- ECG
- Pathology
- Endoscopy
- Health Packages

## **WARJE**

Shop No. 6, Akshay Palace,  
Warje Flyover Chowk, Warje. Pune - 52  
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## **SINHGAD ROAD**

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[www.nucleusdiagnostics.in](http://www.nucleusdiagnostics.in)

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