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# Ultrasonographic screening of major structural anomalies during the NT examinations in infertile patients

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**Fig. 1:** Fig1: Ultrasound scan indicated an increased NT measurement of 7 mm, Note...



**Fig. 2:** Fig2: Multiple dilated proximal bowel loops (15mm) due to small bowel atresia...



**Fig. 3:** Fig3: A 28-year-old, client is admitted at 12.5 weeks gestation with twin...

## Aims and objectives

Nuchal translucency (NT) measurement in the first trimester screening have been recognized as a clear marker for chromosomal and non chromosomal abnormalities, but a true association between increased NT and congenital abnormalities has only been identified in a few cases ( 1,2) . NT screening using sagital views can also screen for fetal structural anomalies for patients that need an early fetal anatomy scan (3). First trimester screening can lead to early...

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## Methods and materials

In a prospective study during one year period 876 NT examinations were performed for 657 women (mean maternal age 30 years, range 19-50) who were conceived after Assisted Conception irrespective of its multiplicity at the Royan Institute between 11 to 14 weeks' gestation. This study approved by research ethics committee and institutional review board in Royan Institute and informed written consent is obtained from the patients. Transvaginal and transabdominal scans were...

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## Results

In the present study 10 fetuses(1.09 %) with structural anomalies diagnosed including: hydrops fetalis, cystic hygroma , jejunal obstruction, hydronephrose, hydrocephaly, trisomy 18 , 2 cases of multiple anomalies and 2 cases of exeterimity anomalies. There were no cases of missed diagnosis of structural anomalies .The NT was abnormal (>95th percentile) in 4/10 cases. Anomalies were detected in only 6 out of 841 fetuses( % 0.71) with normal...

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## Conclusion

The benefits of prenatal diagnosis of congenital anomalies particularly in fetal conceived by assisted reproductive technology (ART) methods are widely known. The need for more accurate and noninvasive prenatal screening such as NT measurement is extra important in the case of assisted conception due to more concern over associated risks of invasive test such as amniocentesis and chorion villus sampling(CVS).Furthermore, the some noninvasive test such as triple test...

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## Personal information

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