Patient ID : p\_id Name : p\_name Age/Sex : age\_sex
Ref. by : doctor\_ref Lab no : Date : test\_date
ELISA
QUADRUPLE TEST\*
Quadruple Test Observed Value Unit Reference Interval
Serum HCG (CLIA/immulite) 6681.00 mIU/ml
Serum AFP (CLIA/immulite) 44.49 ng/ml
Serum free estriol (CLIA/immulite) 3.05 ng/ml 0.07-12.0
Serum Inhibin A (ELISA) 135.90 pg/ml
Risk assessment Graph attached
Trisomy 21 Low risk
Trisomy 13 & 18 Low risk
Neural tube defect Low risk
Summary and interpretation :
Prenatal second trimester screening (Quadruple Test) done in maternal serum is a statistical evaluation and is only a risk assessment for Trisomy 21,18 and neural tube defects using PRISCA 5 software.
This screening can be performed between 14-22 weeks of gestation, but should be preferably done between 15-20 weeks.
The assessment utilizes data in terms of MOM (multiple of median) for biochemical markers-serum AFP, HCG, free estriol and Inhibin A along with gestation age, maternal age, Diabetes mellitus, weight, IVF, smoking, race and previous history of Down's syndrome.
The detection rate for Trisomy 21 is 70-75% with false positive of 5%.
The detection rate for Trisomy 18 is 60-65% with false positive of 0.3%.
The detection rate for neural tube defects is 70-75% with false positive rate of 2-4%
Confirmation of screen positive by amniotic fluid examination is recommended.
Different screening programs available and their detection rates for Down's syndrome :
Screening Time of Test (weeks) Markers Used Detection Rate
Dual serum 9+10 (+6 days) Free beta HCG, PAPP-A Approx 70%
Dual combined 11-13 (+6 days) Free beta HCG, PAPP-A+NT Approx 82-85%
Triple 15-21 (+6 days) AFP, Beta HCG, UE3 Approx 65%
Quadruple 15-21 (+6 days) AFP, Beta HCG, UE3, Inhibin A Approx 75%
Fully integrated 11-13 (+6 days) 15-21 (+6 days) First Trimester- PAPPA & NT
Second trimester- AFP, Beta HCG, UE3, Inhibin A Approx 90%
Reference:
Teitz textbook of Biochemistry.
First trimester or second trimester screening or both, for Down's syndrome, NEJM, Vol 353.
NOTE : This test was processed at third party lab.
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