Preconception and Prenatal Care

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Quiz Question #1

• Routine prenatal care, as practiced in the United States, decreases poor obstetric outcomes
  a) True  b) False

Preconception Care Risk Assessment

• Age
  – Maternal and Paternal
• Reproductive History
  – Previous stillbirths, c/s, postpartum hem., etc.
• Psychosocial
  – Substance abuse
  – Safety
  – Financial

Quiz Question #2

• What is the risk of Trisomy 21 in a 35 year old pregnant woman?
  a) 1/250  b) 1/100  c) 1/75  d) 1/20

<table>
<thead>
<tr>
<th>Age</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>1/250</td>
</tr>
<tr>
<td>36</td>
<td>1/192</td>
</tr>
<tr>
<td>37</td>
<td>1/149</td>
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<tr>
<td>38</td>
<td>1/115</td>
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<tr>
<td>39</td>
<td>1/89</td>
</tr>
<tr>
<td>40</td>
<td>1/69</td>
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</tbody>
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Preconception Care Risk Assessment

• Medical
  – HTN, DM, Sz, Asthma, Thrombophilia, Lupus
• Genetic
  – Cystic Fibrosis, Hemoglobinopathies, Tay-Sachs
• Occupational Exposures
  – Chemicals, Infectious
• Nutrition Exposures
  – Mercury, Lead, Caffeine

Quiz Question #3

• Name three ethnic groups that are at high risk of hemoglobinopathies and thus should have a hemoglobin electrophoresis.
  a) African
  b) Mediterranean
  c) Southeast Asian
Preconception Care

Laboratory Assessment

- Rubella
- Varicella
- Hepatitis B Surface Antigen
- CBC
- HIV
- Hep C
- Hemoglobin A1C
- BMP
- Toxoplasmosis
- Cytomegalovirus
- RPR
- Hemoglobin electrophoresis
- Genetic Screening
- Gonorrhea
- Chlamydia
- TB Skin Test
- Pap Test

Preconception Counseling/Intervention

- Medical
  - Maximize prior to pregnancy
- Genetic
  - Referral to geneticist or appropriate counseling
- Nutrition
  - Prenatal vitamins, folic acid, caffeine
- Medication
  - Changes or cessation
- Substance Abuse
  - Stop!

Quiz Question #4 & #5

- What is the minimum amount of folic acid supplementation a woman should use while planning pregnancy? 
  a) 400 micrograms

- What is the recommended amount of folic acid supplementation for a woman planning pregnancy who has a child with spina bifida? 
  a) 4 mg

Questions??

Prenatal Care

Ideal Schedule

- Preconception Visit
- 6-28wks
  - q4-5wks
- 28-36wks
  - q2-3wks
- 36wks-Delivery
  - q1wk

- Each Visit Assess
  - Weight
  - Gestational Age
  - Blood Pressure
  - Urine glucose/protein
  - Fundal Height, 22+
  - Fetal Heart Rate, 12+
  - Fetal Movement, 19+
  - Preterm Labor/Rupture, 20+, cervical exam PRN
  - Edema
Prenatal Care
6-28wks
- OB Screening, fill out ACOG form or EMR
- Risk assessment
- Prenatal Vitamins
- Establish EDD
  - LMP assessment, u/s if needed
- First Trimester Screen, 11-13 wks
- Second Trimester Screen, 15-20wks
- Anatomy U/S, 18-22wks
- Gestational Diabetes Screening, 24-28wks
- CBC, 24-28wks

Quiz Question #6
- What are the serum markers measured (a,b) and the ultrasound characteristic (c) measured for the first trimester screen?
  a) β HCG
  b) pregnancy-associated plasma protein-A (PAPP-A)
  c) Nuchal Translucency

Quiz Question #7
- What are the serum markers measured for the quad screen?
  a) Alpha-fetoprotein
  b) Unconjugated estriol
  c) HCG
  d) Inhibin-A

Down Syndrome Screening

<table>
<thead>
<tr>
<th>Testing Modality</th>
<th>Detection rate at 5% false positive level</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Trimester Screen with NT measurement</td>
<td>93%</td>
</tr>
<tr>
<td>Second Trimester QuadScreen</td>
<td>81%</td>
</tr>
<tr>
<td>Second Trimester TripleScreen</td>
<td>74%</td>
</tr>
</tbody>
</table>

Quiz Question #8
- What is the value of a 1-hr glucola screen that should prompt further evaluation with a diagnostic 3-hr glucola?
  a) 140

Question #9
- A woman is seen by you in clinic @ 18wks. She had a normal first trimester screen @ 12wks.
  a) What second trimester screening serum test should she have performed?
  b) What are you screening for?
Prenatal Care  
28-36wks

- Each Visit Assess
  - Weight
  - Gestational Age
  - Blood Pressure
  - Urine glucose/protein
  - Fundal Height
  - Fetal Heart Rate
  - Fetal Movement
  - Preterm Labor/Rupture, cervical exam PRN
  - Edema

Prenatal Care  
28-36wks

- Discuss contraception
- Finalize delivery plan
- Rhogam if indicated
- Group B Strep Culture or PCR, 35-37wks
- CBC, 35-37wks
- STD re-screening in high risk populations or new exposure
- Fetal surveillance (US/NST) if indicated

Question #10

- A woman is seen by you in clinic @ 36wks gestation. She is planning on having an elective repeat cesarean delivery. Will you perform a Group B Strep screen on her today?
  a) Yes
  b) No

Question #11

- A woman is seen by you in clinic @ 36wks gestation. She was treated for Group B Strep bacteria @ 10wks with Keflex for 5 days. Will you perform a routine Group B Strep screen on her today?
  a) Yes
  b) No

Prenatal Care  
36wks-Delivery

- Carry out delivery plan
- Fetal surveillance (US/NST) if indicated
- ± strip/sweep membranes
  - ONLY @ 39+ WKS!!
- Plan for post-dates management

Prenatal Care  
36wks-Delivery

- Each Visit Assess
  - Weight
  - Gestational Age
  - Blood Pressure
  - Urine glucose/protein
  - Fundal Height
  - Fetal Heart Rate
  - Fetal Movement
  - Preterm Labor/Rupture, cervical exam PRN
  - Edema
Quiz Question #12

- Name three reasons to perform biweekly NST’s for fetal surveillance.
  - Hypertension
  - Diabetes
  - IUGR
  - Prior Stillbirth
  - Advanced maternal age
  - Thrombophilia
  - Postdates pregnancy