gp SHARED CARE
obstetric

Medications in Pregnancy

2018

Learning Outcomes

- To describe safety categories for medications in pregnancy
- To determine when and where to seek advice regarding safety of medications in pregnancy
- To discuss examples of some “drugs of choice” for common conditions during pregnancy

Medications in Pregnancy

- General perception that any drug exposures during pregnancy pose a potential risk to the fetus
- An Australian study showed that about 96% of women use some form of prescribed or non prescribed medication during pregnancy

Teratogens

Teratogens are environmental agents introduced during pregnancy that interfere with development such that they induce or increase the incidence of a congenital (structural) malformation.

- Drugs
- Infections – Rubella, CMV
- Chemicals – Mercury
- Radiation
- Behavioural teratogens – Alcohol, Valproic acid
- Behavioural and Structural – Rubella, Isotretinion

Teratogens

Drugs to be avoided during pregnancy:-

- Isotretinoin – craniofacial, ear, cardiovascular and limb defects as well as structural CNS anomalies and neurodevelopmental problems
- Valproic acid – fetal valproate syndrome –facial dysmorphism and malformations including neural tube defects, cleft palate and cardiac anomalies as well as neurodevelopmental problems, can occur in > 10% of exposed infants
- Warfarin – use between 6-12 weeks –nasal hypoplasia and stippled epiphyses. Use in later pregnancy – fetal CNS haemorrhage

Timing of Exposure

- “All or none period” – first two weeks after conception or 2-4 weeks amenorrhoea from LMP
- Generally believed that exposures during this time do not cause malformations
- The conceptus is a mass of dividing stem cells with minimal contact with the maternal circulation and which have not yet differentiated into organs

Timing of Exposure

- Embryonic period
- 4-11 weeks amenorrhoea
- Most critical period of development
- Structural defects – NTD, cardiac, orofacial (Thalidomide caused limb defects after exposure
- Between 20-35 days post conception)

Timing of Exposure

- Fetal period
- Exposure does not cause malformations
- May cause disruption of normally formed organs
- (NSAIDs, ACEI – impair fetal renal function – decrease fetal renal production and amniotic fluid volume – fetal joint contractures and pulmonary hypoplasia as a result of oligohydramnios)

Australian Categorisation system for prescribing drugs in Pregnancy

- https://www.tga.gov.au/prescribing-medicines-pregnancy-database

Categories

- Incorrectly imply gradations of risk – B3 is not necessarily safer than C
- Do not take into account different stages of pregnancy
- Often assigned on the basis of animal studies
- Assigned before release of drugs and often do not change despite new evidence

Information sources

- Women's and Children's Hospital Drug Information in Pregnancy and Breastfeeding
- 8161 7222
- http://www.mothertobaby.org/otis-fact-sheets-s13037
- **'Ask Katie'** – GP Partners Pregnancy App

Information sources

Health Direct

1800 022 222

healthdirect.gov.au

can download app

24/7 advice

Pregnancy, birth and baby

1800 882 436

pregnancybirthbaby.gov.au

24/7 advice

Asthma in Pregnancy

- Eliza, age 38, is currently 9 weeks pregnant
- She has asthma for which she uses
- Fluticosone - Salmeterol (Seretide)1 puff bd
  Salbutamol prn
- **How would you advise her about her medications?**

Asthma in Pregnancy

- Budesonide is a category A
- Fluticosone is a category B3
- **Would you suggest that she change preventers?**

Asthma in Pregnancy

Discussion Points:

- The most common potentially serious medical problem that can affect pregnant women
- 1/3 can expect a worsening of their symptoms
- Less likelihood of severe asthma during pregnancy if the condition is well controlled when she conceives
- All women who are pregnant or planning a pregnancy should be advised of the importance of continuing to use the asthma medication that best controls their asthma

Asthma in Pregnancy

Discussion Points:

- Most asthma medications are inhaled – only small amounts of the drug enter the blood – cross the placenta

- It is far better to treat asthma aggressively with inhaled preventers to avoid the need for oral corticosteroids

Asthma in Pregnancy

- She is happy to continue Seretide
- Later that afternoon, she rings and is worried as she has read the CMI leaflet in the medication box and it says to avoid this medication in pregnancy.
- **How do you advise her?**

gp SHARED CARE obstetric

Hypertension in Pregnancy

- Eliza age 38 comes to you for pre natal counselling
- She was diagnosed with hypertension 5 years ago and her BP is well controlled on Perindopril 5 mgs
- **What do you advise her about her medication?**

gp SHARED CARE obstetric

Hypertension in Pregnancy

- You seem to remember that ACE inhibitors are contraindicated during pregnancy.

- **Where would you get accurate, up to date advice?**

Hypertension in Pregnancy

- Some commonly prescribed anti hypertensive drugs are contraindicated or best avoided before conception and during pregnancy

- None have been shown to be teratogenic

- ACE inhibitors
- Angiotensin receptor blockers
- Diuretics
- Beta blockers
- Ca channel antagonists

Hypertension in Pregnancy

- ACE inhibitors are not recommended in the second and third trimesters of pregnancy
- Methyldopa is the drug of choice
- Also Labetalol or Nifidepine

gpSHAREDCARE obstetric

Depression in Pregnancy

Eliza age 38 is 9 weeks pregnant. She has been taking sertraline for depression for the past two years. You first prescribed it after the birth of her second child. She has struggled to cope with two young children and is worried about this third (unexpected) pregnancy. You had previously reassured her that sertraline was safe when she breast fed her baby and would also be safe if she wanted to become pregnant again.

She sees you and a psychologist for counselling.

Depression in Pregnancy

- How do you advise her?
- Would you cease the sertraline?
- Would you change medications?
- Where would you seek information?

Depression in Pregnancy

Discussion Points:

- Accurate up to date information
- http://mothertobaby.org/fact-sheets/sertraline-zoloft-pregnancy/
- Effects of depression on pregnancy
- ? Weaning dose in third trimester due to risk of irritability/seizures

Headache In Pregnancy

- Caitlin is 24 weeks pregnant and this is her first pregnancy. She is well and she doesn't take any regular medications

- She mentions during this visit that she has experienced headaches

- You ascertain that there are no red flags and are happy that these are "normal" hormonal pregnancy headaches

- **How do you advise her re analgesia?**

Headache In Pregnancy

- Paracetamol – category A
- NSAIDs

Non steroidal Anti-inflammatory Medication

- Studies have not found an overall increased risk for birth defects, low birth weight or preterm labour with the use of NSAIDs in the first and second trimester

- Third trimester concerns: –
  - May cause premature closure of the ductus arteriosus which may lead to pulmonary hypertension
  - May inhibit labour
  - May lead to oligohydramnios

Non steroidal Anti inflammatory Medication

- **However!!**
- Therapeutic Goods Administration – 11/10/16
- TGA has completed a recent safety review of the known association between the use of NSAIDs and increased risk of miscarriage.

  (does not apply to topical preparations nor aspirin)
- *Do not use…….during the first six months of pregnancy, except on doctor's advice. Do not use at all during the last three months of pregnancy.*

Nausea in Pregnancy

- Julia is 8 weeks pregnant
- She is well and taking I-folic as recommended
- She sees you for a routine visit and asks about medication for nausea
- **How do you advise her?**

Nausea in Pregnancy

- **As per shared care protocols**

  - ❖Small frequent meals and plenty of fluids
  - ❖Acupuncture
  - ❖Ginger
  - ❖Vitamin B6 25 mgs three times a day
  - ❖Prochlorperazine/Metoclopramide prn
  - ❖Ondansetron
  - ❖IV fluids

Herbal Medications

https://thewomens.r.worldssl.net/images/uploads/fact-sheets/Herbal-traditional-medicines-in-pregnancy.pdf

Medications considered safe:-

- Ginger
- Echinacea
- Magnesium
- Fish oil
- Herbal teas

✓ connect
✓ care
✓ innovate

www.gppaustralia.org.au

Thank You