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Perinatal mental health: what a GP needs to know

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making a difference together

Overview

- Why is Perinatal Psychiatry important?
- Post-partum psychiatric disorders
- Prescribing in pregnancy
- Prescribing and breast feeding
- Teesside community perinatal psychiatry service
- Perinatal services in York
- Case Study
- Discussion

Why is perinatal psychiatry important?

- MBBRACE report for 2014-2016
  - Overall
    - 259 deaths (34 = coincidental) therefore 225 deaths in report
    - Death rate 9.78 per 100,000
  - Mental health
    - 71 deaths by suicide
    - Mortality rate 2.9 per 100,000
  - No significant change in maternal suicide rate since 2003
  - 1 in 6 women who died between 6wks and 1yr postnatal, died of suicide (1 in 7 in last enquiry).

Why is perinatal psychiatry important?

- Babies die too.
- Childhood development is affected.
- Bipolar –
  - 50+% relapse postnatally.
  - 25% postnatal psychosis
- It is a treatable illness.
- Medication used may be teratogenic.
- Little research into what medication works in this patient group

Post-partum Psychiatric disorders

- The Blues
- Puerperal psychosis (= post-partum psychosis)
- Post-partum non-psychotic depression

The Blues

- Common – 70% of mothers
- Occurs in first 10 days, peaks at day 3 or 4
- Weepiness
- Irritability
- Variable mood
- Poor concentration and memory
- Short lived
- ?Related to hormonal changes
- Management - reassure

Puerperal psychosis

- Uncommon. 1-2 per 1000
- Most common diagnosis is bipolar
  - » Mania
  - » Psychotic depression
  - » Mixed states
- Risk factors
  - » Previous history of bipolar disorder
  - » Family (especially maternal) history puerperal psychosis
  - » Family history of bipolar
  - » ?due to fall in oestrogen/sleep disturbance in first postnatal week
  - » 50% have no past history or family history.

Puerperal Psychosis cont

- Symptoms
  - Rapid, early onset. Most develop symptoms in first 7 days
  - Mood change
  - Mood congruent delusions and hallucinations
  - Insomnia, anorexia, poor concentration, hyperactivity.
  - Risk to self – suicide and risks of mania
  - Risk to baby – neglect, direct harm and reckless care
- Outlook for this episode good.
- Increased risk of post-partum and non-post-partum episodes

Post-partum non-psychotic depression

- Common : 10-15% of all deliveries
- Risk factors
  - Past history of depression
  - Adverse events around the time of delivery
  - Poor relationship with partner
- Symptoms
  - Low mood
  - Fatigue
  - Excessive anxiety re baby
  - Poor bonding with baby
  - Lack of enjoyment
  - Insomnia, anorexia irritability
- Outlook for this episode is good
- Increased risk of further post-partum and non-post-partum episodes

Red Flags

- **‘Red Flag’ presentations should prompt urgent senior psychiatric assessment**
- Recent significant change in mental state or emergence of new symptoms
- New thoughts or acts of violent self-harm
- New and persistent expressions of incompetency as a mother or estrangement from the infant

Amber flags

- **Amber flag = indicator of increased future risk**
  - **Past history of psychotic disorder**
  - **Family history of bipolar disorder or postpartum psychosis – closely monitor and refer if any change in mental state.**
  - **Personal and familial patterns of occurrence and re-occurrence**

Psychological management

- Lower threshold for psychology
- Highlight perinatal within referral, to ensure prioritisation as per NIHCE

Pharmacological management

- Evidence very poor
- Unable to get ethical approval for research
- Balance risks and benefits of treatment and non-treatment

Risk benefit analysis of prescribing in pregnancy

Risks of treating in pregnancy

- Teratogenicity – MCMs, minor CMs, developmental delay.
- No proven benefit of meds in pregnancy
- Increased birth weight, linked to maternal complications
- Low birth weight

Risk of not treating in pregnancy

- Depression in pregnancy increases risk depression postnatally
- Detrimental effect of mother's ill-health on parenting ability and infants development
- DSH, suicide +/- infanticide

Teratology

- 50% pregnancies unplanned
- Pregnancies “typically” detected 6 weeks post conception – most sensitive period for teratogenic effects has passed
  - Neural tube development begins 3 weeks post conception
  - Single heart tube developed by 3 weeks post conception
  - Cardiac septa developed 4-5 weeks post conception
  - Valves developed 5 weeks post conception
- Risk MCMs in general population 2-4%

Neurodevelopmental delay

- 2011 study, UK epilepsy pregnancy register. 210 children.
- 4.5% children in control group had evidence of mild or significant developmental delay
- 39.6% children exposed to in utero NaV (OR 26.1)
- 20.4% children exposed to in utero CBZ (OR 7.7)
- 2.9% children exposed to in utero LTG

SSRIs

- No current convincing evidence of increase in cardiac malformations
  - Most recent meta-analysis no increase in risk
  - Some studies suggest small increase in absolute risk, others found no increase
  - Some evidence may be patient group effect
- Citalopram most investigated drug
  - Single study suggested stat sig increase in cardiac malformations
  - Majority of studies failed to demonstrate any increase in risk
  - Meta-analysis concluded no increase in risk
- No evidence increase in risk of other malformations

SSRIs cont

- Persistent Pulmonary Hypertension of the Newborn (PPHN)
  - Risk in general population 1- 2 : 1000
  - If take SSRI after 20 weeks gestation risk 3 : 1000
  - 20% mortality
  - PPHN class effect, all SSRIs
  - Theoretical risk with SNRIs
- Poor Neonatal Adaptation Syndrome
  - Majority of neonates healthy
  - May be due to serotonin syndrome and/or withdrawal
  - Jitteriness, tremor, hypoglycaemia, tachypnoea, resp distress, poor temp control, poor feeding, low APGAR, irritability, increased tone
- Possible association with ASD – confounding

Other antidepressants

- What works for the patient?
- Increased rate spont abortion and preterm birth with all anti-dep – thought to be patient group effect and not meds.
- TCAs
  - Older drug, more cumulative evidence
  - Conflicting data but on balance no increased risk cong malf
  - Some evidence increased risk spont abortions, preterm delivery, pre-eclampsia and ASD
  - Amitriptyline, lofepramine, clomipramine have previously been widely used.

Other anti-depressants

- Venlafaxine
  - Data too limited to confirm or exclude increase in cong malf
  - Theoretical risk PPHN but no evidence of it yet
  - PNAS including seizures.
  - Monitoring of maternal BP
- Mirtazapine
  - Limited evidence does not suggest increased risk cong malf but too limited to exclude increase in risk.
  - PNAS and increased risk neonatal hypoglycaemia

Atypical antipsychotics

- What works in the patient?
- Antipsychotics as a group assoc with slight increase risk cong malf, spont abortions, preterm delivery – thought to be patient group
- GTT recommended for women taking atypicals at 28/40
- Data limited on all atypicals

Atypical antipsychotics

- Quetiapine
  - No significant increase in congenital malformations or spontaneous abortions but very limited data
  - PNAS – one study suggested worse for quetiapine than other drugs
  - Increased problems with maternal glycaemic control and fetal weight.
- Risperidone and olanzapine
  - Evidence of large and small gestational weight babies
  - Prolactin problems

Prescribing summary

- Contact UKTIS for up-to-date evidence and advice
  - Tel 0344 8920909
- Inform patient and family of risks and benefits
- Keep doses to minimum, and avoid polypharmacy
- What is known to work for the patient?
- Antidepressants:
  - If well controlled and stable on current drug, continue it
  - No dose tapering at end of pregnancy
  - PPHN is SSRI class effect – not just paroxetine
- Mood stabilisers:
  - Avoid valproate and lithium
  - Minimise dose, divide daily dose
- Antipsychotics:
  - Depot increases EPSEs in neonate

Breast-feeding and drugs

- All anti-dep and anti-psychotics excreted in breast milk at low levels
- If baby born at term (>37wks), weighs more than 6lb and otherwise well, able to breast feed on SSRIs and venlafaxine.
- Avoid sedating anti-dep as patient needs to be awake for night feeds.
- Breast-feeding advice for sedating drugs – consider expressing, avoiding feeding in hours after taken nocte dose, or breast feed 24/7.

Breast feeding

- Must inform patient of possible risks
- Inform midwife/HV also
- Monitor baby
- All professionals involved in care of infant should be informed of psychotropic medication use.
- Sertraline expressed at <1% maternal weight adjusted dose.
- Amitriptyline 1%
- Fluoxetine 4%

TEWV community perinatal service

- Pregnant and *History* of severe mental health problems in past (either perinatal or in general psychiatric history) – previous admission to psychiatric hospital, or diagnosis of bipolar, schizophrenia or severe depression.
- Pregnant and *Current* symptoms of severe mental health problems, and initial treatments already attempted in primary care.
- Women with confirmed pregnancy who require specialist advice on prescribing of psychotropics in pregnancy.
- Women of child-bearing age with severe and enduring mental illness who require pre-conception counselling re medication options.
- Women up to one year postnatal with current symptoms of significant mental health problems, and initial treatments already attempted in primary care e.g. severe depression, anxiety, OCD.
- Women up to one year postnatal who require specialist advice on prescribing of psychotropics in breast feeding.

Case Example

- 37, married lady
- Planned and accepted first pregnancy
- Normal, full term delivery

Case History cont

- 7 days post-partum
  - Low mood
  - Unable to cope with baby
  - Heard voices criticising her childcare
- 14 days post-partum
  - Deluded that baby was dying
  - Visions of dead grandmother
  - Took overdose
- Crisis team became involved.
  - Diagnosed with depression with psychotic features

Case history cont

- Admitted to general ward informally (MBU full)
  - Attempted to leave
  - Aggressive
  - Not eating or drinking
  - Deluded baby dying
- Detained under Sect 2 MHA
  - Prescribed anti-depressants, anti-psychotics and anxiolytics
  - Given emergency ECT

Case History cont

- Transferred to MBU
  - Improved but still low and hopeless
  - Deluded re baby dying
  - Deluded food and drink contaminated
- Reunited with baby
  - Arms-length obs with baby
  - Attempted to smother baby
- Improved but then dropped baby
  - Contact stopped

Case History cont

- Treatment continued
  - ECT
  - Psychotropic drugs
- Improved further
  - Delusions ceased

    Mood brighter

    Bond with baby improved

    Took over care of baby with support
- Leaves began
- Discharged.
- Excellent, full recovery. Excellent bond with baby.

Case History cont

- At 18 – depression with psychotic symptoms
- At 33 – depression without psychotic symptoms
- **Past psychiatric history not obtained and/or documented**

Discussion

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Mood stabilisers and Contraception

- Carbamazepine and phenytoin are both enzyme inducers.
- Cannot use CBZ or PHT with Progesterone only OCP or implants (depot ok as bypasses metabolism).
- If on CBZ or PHT, contraception minimum:
  - 2 x standard OCP (50µg)
  - If BTB ↑ to 60 or 75µg
  - Advised to tricycle packs
  - Depoprovera ↑ freq from 12-10 weekly

Mood stabilisers and Contraception

- Emergency contraception if on CBZ/PHT:
  - Normal dosage is 750µg, 12hrs then 750µg
  - Should ↑ to 1.5mg, 12hrs then 750µg
- Lamotrigine plus OCP leads to increased clearance of lamotrigine.
- **NB** swapping women from conventional to atypical antipsychotics. Conventionals lead to high prolactin levels and lack of ovulation. Atypicals do not.

Lithium and Pregnancy

- Epstein's anomaly –
  - Prolapse of tricuspid valve into right ventricle
  - originally Li thought to ↑ x400. Newer studies suggest Li ↑ risk of all malf's x3 and cardiac x8.
- Spontaneous malf's of 2-3% of live births, means 1:10 chance of congenital problem from women taking Li during pregnancy.
- 3rd trimester risk of lithotoxicity to foetus, cardiac arrhythmias, cyanosis and hypertonicity, goitre and neonatal hypothyroidism.

Other psychotropic med's in pregnancy

- Risk-benefit analysis

Unhealthy lifestyle of women with untreated illness associated with:	**Untreated antenatal depression and anxiety associated with:**
Poor diet	Low birth weight
Increased smoking, drinking and drugs	Smaller head circumference
Lack of exercise	Impaired attachment
Impaired self-care	Impaired cognition
Unhygenic living conditions	Behavioural disturbances
Poor compliance with antenatal care	Relapse or deterioration in mental state
Suicide	

Other psychotropic med's in pregnancy

TCA's	Old drugs. Lots data available. No ↑ in congenital malformation rate.
SSRI's	**↑ in spontaneous abortion x 13.3%** (Goldstein 1995) Need more data.
Li	More detail in Li part of talk.
CBZ	Spina bifida, craniofacial anomalies, microcephaly and growth retardation.
VPA	Congenital anomalies, growth retardation, hepatotoxicity, fetal distress. Also children show neurological dysfunction with increased excitability in infancy and up to 6 years.
Typical antipsychotics	No increase cong malf's even with high potency, oral and IM. Chlorpromazine and haloperidol have most research data.
Anticholinergics	Possibly teratogenic. More data needed. Avoid if poss.
Benzo's	Increased MCM when used in 1st tri, especially cleft lip and palate. Can produce neonatal toxicity and withdrawal.

References

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Discussion

UK Epilepsy and Pregnancy Register

- Established 1996
- 3607 outcomes to 31.03.2005
- Cases referred by neurologists, epilepsy nurse specialists, obstetricians, midwives, GPs, any other health professionals, and self-referrals. (Freephone no. and website).
- Observational study.
- Only 40-50% eligible cases in UK registered.

UK Epilepsy and Pregnancy Register

- Inclusion criteria
  - Pregnant women with epilepsy, whether or not taking AED, mono or polytherapy.
  - Must be registered BEFORE outcome of pregnancy known.

- Exclusion criteria
  - Any prenatal test (USS or blood) shows abnormality before registered.
  - Pregnancy loss in which an abnormality identified before registered.
  - No AED during 1st trimester, but then had 2nd and 3rd trimester exposure.

UK Epilepsy and Pregnancy Register

- Outcome data collected 3 months after expected delivery data.
- Major congenital malformation rate

$$= \frac{\text{live births with MCM + pregnancy losses with MCM}}{\text{total live births + pregnancy losses with MCM}}$$

UK Epilepsy & Pregnancy Register

- 4414 pregnancies registered, 3607 full outcome data
- MCM rates:
  - no AED 3.5%
  - Monotherapy 3.7%
  - Polytherapy 6.0%
- Exposed pregnancies, monotherapy MCM rates

CBZ	2.2%	OR	1.0
LTG	3.2%		1.44
VPA	6.2%		2.78

Confidence limits overlap, not statistically significant.

UK Epilepsy and Pregnancy Register

- All drugs have a dose response to MCM rate.
- Valproate in combination with any of others, leads to ↑↑↑ MCM rate.
- Study does not give information about effects of folic acid.