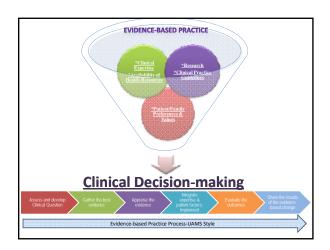
Evidence-based Practice-UAMS style Magnesium Sulfate for Neuro-protection prior to Preterm Delivery



Perinatal Conference 2012 Melanie J. Ware, DNP, APN-CNM





Assess and develop Clinical Question

 Does Magnesium Sulfate administration, before an imminent early preterm delivery reduce the risk of cerebral palsy in surviving infants between the gestational ages of 24 weeks through 34 week?



Gather the best evidence

- Gynecol Obstet Fertil 2008, A Prospective PREMAG Trial
- Cochrane Database of Systematic Reviews, 2009
- Am J Obstet Gynecol 2009, A Systematic Review and Meta-analysis
- Obstet Gynecol 2009, A Meta-analysis



Appraise the evidence

How do you know if the evidence is "good"?

- Is the evidence recent-yes
- Is their evidence from multiple studies-yes
- Are the sample sizes adequate-yes
- Will the results help me in caring for my patients?

Research/EBP Council recommends John Hopkins Appraisal Tools for Research and Non-Research

Integrate expertise & patient factors: Implement

The Funnel Effect

Evidence isn't one dimensional:

- ✓ The healthcare provider's (your) expertise
- ✓ The clinical assessment of the patient
- ✓ The patient's preferences and values



Plan only if you want to be successful:

- ✓ Assess the appropriate and feasibility of the recommendations
- ✓ Available resources and administrative support
- ✓ Create an action plan or pilot the change

Evaluate the outcomes

Improve clinical outcomes? Patient/Nurse satisfaction? Reduce cost of patient care? Improve unit operations?



If expected effects were not produced, consider all alternative explanations...

- Did you have adequate administrative support?
- Did the staff implement the change?

Share the results of the evidencebased change

Why is it important to disseminate the findings?

- "Up to two decades may pass before the findings of research becomes part of the routine clinical practice."-www.ahrq.gov
- It is unethical to not share an evidencechange that can improve patient care.



A Piece of the Procedure.....



- Magnesium Sulfate, 4 grams to be given over 30 minutes followed by 1 or 2 grams per hour for up to 12 hours. This is to include the Magnesium Sulfate given prior to and during transport.
- When delivery is planned, Magnesium Sulfate shall be infused for at least. 4 hours before the delivery occurs. Give 4 grams of Magnesium Sulfate only (no hourly Magnesium Sulfate maintenance) 4 hours before the planned delivery (up to 34 weeks 6 days).
- or Indocin) to complete administration of corticosteroids.

 If the patient represents to ES with an imminent delivery and it has been > 24 hours since the Magnesium Sulfate had been given and the patient is < 32 weeks 0 days, a (one-time only) 4 gram Magnesium Sulfate re-loubus may be given.
- If the patient has preeclampsia and the Magnesium Sulfate is being used to prevent an eclamptic seizure, the Magnesium Sulfate therapy may be extended as deemed appropriate by the health care beam.

Don't wait for the best evidence to come to you. Seek out the best evidence or generate it for yourself.



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• Copies of the EBP tools are available at centerfornursingexcellence@uams.edu

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