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Arabic Summary

الملخص العربي

لقد أعدت هذه الرسالة في محاولة لتحديد عوامل الخطر علي الجنين من الأدوية المستخدمة في التخدير أثناء الحمل .

تتضمن وصف فسيولوجي وتشريحي للوحدة الجنينية المشيمية الأمومية مع وصف للوظائف المشيمية.

١- الوظيفة الغذائية .

٢- الانتاج الأنزيمي الهرموني .

٣- الوظيفة الحاجزية المشيمية الدموية .

٤- النقل المشيمي للغازات التنفسية .

٥- الوظيفة المناعية .

النقل المشيمي للأدوية :

وجد أنه يعتمد علي :-

١- الذوبان الدهني للدواء .

٢- درجة التأين للدواء .

٣- الارتباط البروتيني .

٤- الوزن الجزيئي للدواء .

٥- ممال التركيز الجنيني الأمومي .

٦- عوامل مشيمية مثل مساحة وسمك الغشاء، معدل الجريان الدموي الجنيني والأموي والأنزيمات المشيمية.

وكذلك القبط الجنيني للأدوية يعتمد علي :

١- التغيرات في الدوران الجنيني .

٢- درجة حموضة دم الجنين .

٣- الارتباط البروتيني البلازما .

٤- التمثيل الجنيني .

٥- الارتباط النسيجي .

تأثيرات الأدوية المستخدمة في التخدير علي الجنين :-

وتتضمن تأثيرات كل من :-

- ١- الأدوية المخدرة الوريدية مثل : ثيوبنتون ، ميثوهكستون ، الباربيتيرات، كيتامين، أيتوميدات ، الثازن ، بروبوفول، بتروديباين ، المسكنات المخدرة ومضادا المخدرات.
- ٢- مخدرات العضلات مثل : سيكساميثونيم، روكيورونيم ، ديكاميثونيم ، الكيرونيم ، بانكيرونيم ، د. تيبوكيورارين، جالامين ، فازوننيم، فيكورونيم واتراكيم .
- ٣- المخدرات الغازية والمتبخرة مثل : أكسيد النيتروز ، هالوثان، ميثوكسيفلورين ، فلوروكسين ، تريكلوراثيلين ، أثير، سيكلوبروبون، انفلورين ، أبزوفلورين و سيفوفلورين.
- ٤- المخدرات الموضعية ويعتمد النقل المشيمي للمخدرات الموضعية علي :

أ- عوامل أموية :

(١) جرعة الدواء الكاملة .

(٢) الارتباط البروتيني .

(٣) ثابت التآين .

(٤) التمثيل والخراج .

(٥) موضع الحقن .

(٦) إضافة الأدرينالين.

(٧) معدل الجريان الدموي المشيمي .

ب- عوام جنينية مثل الارتباط البروتيني القبط الكبدي درجة حموضة دم الجنين

تتضمن الأدوية المخدرة الموضعية علي ليحنوكين ، بريلوكين ، مييفاكين ، بييفاكين ، بروكين ، روبيفاكين ، كلوروبروكين وأنيديوكين.

٥- الأفيونات التي تعطى داخل النخاع الشوكي

تقييم الجنين وحديثي الولادة

أ- الجنين قبل الولادة:

١- معدل ضربات القلب الجنيني قبل الولادة باختبارات غير مجهدة واختيار تحدى الأوكسيتوسين .

٢- الموجات فوق الصوتية.

٣- اللاكتوجين المشيمي الأدمي .

٤- تحليل السائل الأمينوسي .

ب- مراقبة الجنين خلال الجراحة والولادة :

١- التسمع لضربات قلب الجنين .

٢- المراقبة المستمرة الالكترونية لضربات قبل الجنين .

٣- عينة من دم الجنين .

٤- جهاز قياس الأكسجين والنبض في الجنين .

ج- تقييم حديثي الولادة :

١- معيار أيجار .

٢- الاختبارات العصبية السلوكية الأخرى

- كل أدوية التخدير الشائع الاستعمال تستطيع عبور المشيمة والفهم الدقيق لكيفية نقل الأدوية عبر المشيمة وتأثيرها علي الجنين لهم لإعطاء التخدير المناسب للحالات سواء موضوعي أو كلي .

- التعرض لأدوية التخدير قبل تكوين الأعضاء يسبب كل التأثير أو لا تأثير علي الإطلاق أما أن الجنين لا ينمو أو يكمل النمو بدون أي عيوب خلقية كي لا توجد علاقة واضحة بين الأدوية المستخدمة والعيوب الخلقية للجنين كما لا توجد علاقة واضحة بين النهائية وأدوية التخدير .

- أدوية التخدير المستنشقة تخفض من استثارة عضلة القلب ولكن لا يوجد دليل علي نظام معين يزيد احتمال الولادة المبكرة وفي أي عملية خطيرة المحافظة علي حياة الأم أولاً ثم خطورة العملية والتخدير علي الجنين ثانياً .

- الآن علي مستوى العالم يتم تفضيل التخدير الموضوعي لتخدير حالات الولادة القيصرية حيث أن التخدير الموضوعي للقيصرية يقلل احتمالات الوفاة عن التخدير الكلي لأنها تقلل احتمال دخول محتويات المعدة داخل القصبة الهوائية ، كمية الأدوية أقل كما أنها ممتازة في التحكم في الألم بعد الولادة ولا يتم هبوط نفس الطفل بعد الولادة كي قد يحدث مع التخدير الكلي .