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>>> <Ovid_Online@ovid.com> 8/13/2007 9:50 AM >>>
Ovid Technologies, Inc. Email Service
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Search for: 14 or 18
Results: 1-60

Database: Ovid MEDLINE(R) <1996 to August Week 1 2007>
Search Strategy:

1. Dystocia/pc, ep [Prevention & Control, Epidemiology] (198)
2. dystocia/ (672)
3. Risk Factors/ (226597)
4. 2 and 3 (174)
5. Brachial Plexus Neuropathies/pc, ep [Prevention & Control, Epidemiology] (56)
6. Brachial Plexus Neuropathies/ (646)
7. 3 and 6 (39)
8. 2 or 6 (1286)
9. Cesarean Section/ (9537)
10. 8 and 9 (205)
11. 1 or 4 or 5 or 7 or 10 (468)
12. limit 11 to (humans and english language and yr="2000 - 2007") (236)
13. limit 12 to "review articles" (45)
14. from 13 keep 1-2,4,6-24,27-37,40-45 (39)
15. birth injuries/ or labor/ (772)
16. 11 and 15 (85)
17. limit 16 to yr="2005 - 2007" (28)
18. 17 not 14 (21)
19. 14 or 18 (60)
20. from 19 keep 1-60 (60)

**********************

Result <1>
Unique Identifier
17575657
Authors
Shields SG. Ratcliffe SD. Fontaine P. Leeman L.
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Title
Dystocia in nulliparous women. [Review] [58 refs]
Source
Local Messages
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.

8/14/2007
Abstract

Dystocia is common in nulliparous women and is responsible for more than 50 percent of primary cesarean deliveries. Because cesarean delivery rates continue to rise, physicians providing maternity care should be skilled in the diagnosis, management, and prevention of dystocia. If labor is not progressing, inadequate uterine contractions, fetal malposition, or cephalopelvic disproportion may be the cause. Before resorting to operative delivery for arrested labor, physicians should ensure that the patient has had adequate uterine contractions for four hours, using oxytocin infusion for augmentation as needed. For nulliparous women, high-dose oxytocin-infusion protocols for labor augmentation decrease the time to delivery compared with low-dose protocols without causing adverse outcomes. The second stage of labor can be permitted to continue for longer than traditional time limits if fetal monitoring is reassuring and there is progress in descent. Prevention of dystocia includes encouraging the use of trained labor support companions, deferring hospital admission until the active phase of labor when possible, avoiding elective labor induction before 41 weeks' gestation, and using epidural analgesia judiciously. [References: 58]
Emergency drills in obstetrics: reducing risk of perinatal death or permanent injury.

Sorensen SS.
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Title
Emergency drills in obstetrics: reducing risk of perinatal death or permanent injury.
Source
Local Messages
Christ Hospital Medical Library owns this journal. Please refer to library intranet pages or contact library staff for specific holdings information.
Abstract
This article describes the need for mock emergency drills in perinatal emergencies such as shoulder dystocia, maternal hemorrhage, and emergency cesarean section. Effective drills are a patient safety initiative to reduce medical errors and adverse events during the antepartum, intrapartum, and postpartum periods. Successful strategies are identified from other fields of practice to improve patient outcomes. Realistic, institutional specific scenarios for mock emergency drills result in improved team behaviors leading to better outcomes for mothers and infants.
Publication Type
Journal Article.

A review of factors associated with dystocia and cesarean section in nulliparous women. [Review] [90 refs]
Lowe NK.
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Lowe, Nancy K.
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Title
A review of factors associated with dystocia and cesarean section in nulliparous women. [Review] [90 refs]
Source
Local Messages
Christ Hospital Medical Library owns this journal. Please refer to library intranet pages or contact library staff for specific holdings information.
Abstract
The primary indication for cesarean section in nulliparous women continues to be clinical diagnoses that fall under the rubric of dystocia. These diagnoses account for approximately two-thirds of all cesareans experienced by otherwise healthy nulliparous women. Contemporary research evidence suggests that this clinical phenomenon is complex and multifactorial. This review explores factors associated with the phenomenon of dystocia in the context of a conceptual model that considers women's physical and psychological characteristics, fetal factors, intrapartum care and interventions, assessments and clinical decision-making of health care providers, the sociopolitical environment, and the social and physical environment of childbirth. Clinical recommendations include emphasis on the maintenance
of normal weight and weight gain during pregnancy, delaying the admission of nulliparous women to the hospital until active labor is established, avoiding elective induction for nulliparous women, keeping women well-hydrated and well-fed during labor, providing high-quality supportive care during labor, staying the course with effective treatment when dystocia is encountered, and a renewed emphasis on the psychobehavioral preparation of nulliparous women for the realities of labor. [References: 90]

Publication Type
Journal Article. Review.

Result <5>
Unique Identifier
17261098
Authors
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Institution
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Title
Women with gestational diabetes mellitus in the ACHOIS trial: risk factors for shoulder dystocia.
Source
Abstract
BACKGROUND: Gestational diabetes mellitus (GDM) is associated with increased risk of fetal macrosomia and shoulder dystocia. However, not all women with GDM and fetal macrosomia have shoulder dystocia. Aims: To identify the risk factors for shoulder dystocia in women with gestational diabetes using data from women recruited into the routine care group of the ACHOIS trial. METHODS: A secondary analysis was performed on data collected from women enrolled in the ACHOIS trial. Bivariate analyses were performed using the Fisher exact test. Variables found to be significantly associated with shoulder dystocia and previously identified risk factors were used as explanatory variables in multivariate analyses. RESULTS: A positive relationship was found between the severity of maternal fasting hyperglycaemia and the risk of shoulder dystocia, with a 1 mmol increase in fasting oral glucose-tolerance test leading to a relative risk (RR) of 2.09 (95% CI 1.03-4.25). Shoulder dystocia occurred more often in births requiring operative vaginal delivery (RR 9.58, 95% CI 3.70-24.81, P < 0.001). Macrosomic and large-for-gestational-age infants were more likely to have births complicated by shoulder dystocia (RR 6.27, 95% CI 2.33-16.88, P < 0.001 and RR 4.57, 95% CI 1.74-12.01, P < 0.005, respectively). Fetal macrosomia was the only variable to maintain its significance in all multivariate analyses. CONCLUSIONS: Fetal macrosomia is the strongest independent risk factor for shoulder dystocia. Effective preventative strategies are needed.
Publication Type
Journal Article. Research Support, Non-U.S. Gov't.

Result <6>
Unique Identifier
17403398
Authors
Conde-Agudelo A. Rosas-Bermudez A. Kafury-Goeta AC.
Authors Full Name
Institution
Centro de Estudios e Investigacion en Salud and Department of Obstetrics and Gynecology, Fundacion Santa Fe de Bogota, Bogota, Colombia.
Title
Effects of birth spacing on maternal health: a systematic review. [Review] [35 refs]
Source
Local Messages
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.
Abstract
The objective of the study was to explore the association between birth spacing and risk of adverse maternal outcomes. The study was a systematic review of observational studies that examined the relationship between interpregnancy or birth intervals and adverse maternal outcomes. Twenty-two studies met the inclusion criteria. Overall, long interpregnancy intervals, possibly longer than 5 years, are independently associated with an increased risk of preeclampsia. There is emerging evidence that women with long interpregnancy intervals are at increased risk for labor dystocia and that short intervals are associated with increased risks of uterine rupture in women attempting a vaginal birth after previous cesarean delivery and uteroplacental bleeding disorders (placental abruption and placenta previa). Less clear is the association between short intervals and other adverse outcomes such as maternal death and anemia. Long interpregnancy intervals are independently associated with an increased risk of preeclampsia. Both short and long interpregnancy intervals seem to be related to other adverse maternal outcomes, but more research is needed. [References: 35]
Publication Type

Result <7>
Unique Identifier
17011400
Authors
Hankins GD. Clark SM. Munn MB.
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Title
Cesarean section on request at 39 weeks: impact on shoulder dystocia, fetal trauma, neonatal encephalopathy, and intrauterine fetal demise. [Review] [43 refs]
Source
Abstract
PURPOSE: The purpose of this analysis was to determine the impact on specific forms of neonatal morbidity and mortality by allowing women to opt for delivery...
by elective cesarean section at 39 weeks of gestation (EGA). According to the National Vital Statistics Reports, over 70% of deliveries in the U.S. annually are at gestational ages ≥ 39 weeks EGA. Estimating that over 4 million deliveries occur annually in the United States, this would yield approximately 3 million pregnancies wherein the woman may exercise her choice for either primary or repeat cesarean section at 39 weeks EGA or at the point when labor is established.

METHODS: A search was conducted using Ovid Medline spanning the past 10 years using the following key words: fetal trauma, shoulder dystocia, brachial plexus palsy, neonatal skull fracture, obstetrical trauma, traumatic delivery, intrauterine fetal demise, stillbirth, fetal demise, and neonatal encephalopathy. Using this search technique, over 2100 articles were identified. The abstracts were reviewed and pertinent articles were chosen for further consideration. The identified articles and their applicable references were obtained for inclusion in this review. Preference was given to publications on or after the year 2000 with the exception of classical or sentinel articles, which were included without regard to year of publication. RESULTS: Four major categories of neonatal morbidity and mortality are discussed: Shoulder dystocia: Accepting that we do not have a successful method for the prediction or prevention of shoulder dystocia, the question becomes, "What is the chance that a baby will sustain a permanent brachial plexus injury at delivery?" Additionally, is there a significant protective effect of cesarean section in reducing the risk of such injury? Currently, the occurrence rate of brachial plexus palsy at the time of vaginal delivery ranges from 0.047% to 0.6% and for cesarean section from 0.0042% to 0.095%.

Using a composite estimate of the risk of 0.15% for vaginal deliveries and applying it to the 3 million deliveries ≥ 39 weeks EGA, approximately 4500 cases of brachial plexus palsy would occur. If only 15% of these injuries were permanent, 675 permanent brachial plexus palsies would occur annually. If the risk of permanent injury is 1 in 10,000 as reported by Chauhan, 300 permanent brachial plexus palsies would occur annually in the United States. The range then for permanent brachial plexus injuries that could be avoided with cesarean section on request would appear to vary between 1 in 5000 and 1 in 10,000 vaginal births. Fetal trauma: The incidence of significant birth trauma varies from 0.2 to 1 to 2 per 1000 births. The use of sequential instruments, for example, vacuum followed by forceps or vice versa, is specifically associated with an unacceptably high injury rate. Intrapartum-related neonatal deaths of vertex singleton fetuses with birthweights > 2500 g from traumatic cranial or cervical spine injury secondary to vacuum- or forceps-assisted vaginal delivery are still occurring. Overall, the frequency of significant fetal injury is significantly greater with vaginal delivery, especially operative vaginal delivery, than with cesarean section for the nonlaboring woman at 39 weeks EGA or near term when early labor has been established. Neonatal encephalopathy: The prevalence of moderate to severe neonatal encephalopathy is 3.8/1000 term live births with a neonatal fatality rate of 9.1%. In 4% to 10% of cases, the etiology appears to be pure intrapartum hypoxia. Intrapartum hypoxia superimposed on antepartum risk factors may account for up to 25% of the moderate to severe encephalopathies, according to one cohort. A paradox in the data thus far is that infants born to nonlaboring women delivered by cesarean section had an 83% reduction in the occurrence of moderate or severe encephalopathy. Considering a prevalence of moderate or severe neonatal encephalopathy of 0.38% and applying it to the 3 million deliveries, 11,400 cases of moderate to severe encephalopathy would occur. The rate of encephalopathy observed in infants delivered by cesarean section would yield approximately 1938 cases. This net difference in moderate to severe encephalopathy would represent 9462 cases annually in the United States that could be prevented with elective cesarean section. Although cesarean delivery may be protective for the development of neonatal encephalopathy, to date it has not proven to be protective of long-term neurologic injury in the form of cerebral palsy with or without mental retardation and/or seizure disorders. Intrauterine fetal demise: Copper reported that the rate of stillbirth is consistent from 23 to 40 weeks EGA with about 5% of all stillbirths occurring at each week of gestation. Yudkin reported a rate of 0.6 stillbirths per 1000 live births from 33 to 39 weeks EGA. After 39 weeks EGA, a significant increase in the stillbirth rate was reported (1.9 per 1000 live births). Fretts reported an impact that far exceeds any other strategy implemented for stillbirth reduction thus far.

CONCLUSION: It is reasonable to inform the pregnant woman of the risk of each of the above categories, in addition to counseling her regarding the potential risks
of a cesarean section for the current and any subsequent pregnancies. The clinician's role should be to provide the best evidence-based counseling possible to the pregnant woman and to respect her autonomy and decision-making capabilities when considering route of delivery. [References: 43]

Table of Contents

Publication Type
Journal Article. Review.

Result <8>
Unique Identifier
17364283
Authors
Mollberg M. Wennergren M. Bager B. Ladfors L. Hagberg H.
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Title
Obstetric brachial plexus palsy: a prospective study on risk factors related to manual assistance during the second stage of labor.
Source
Local Messages
Christ Hospital Medical Library owns this journal. Please refer to library intranet pages or contact library staff for specific holdings information.

Abstract
BACKGROUND: To evaluate the association between obstetric brachial plexus palsy and obstetrical maneuvers during the second stage of delivery. METHODS: Prospective population-based case control study. Cases of obstetric brachial plexus palsy were compared with a randomly selected control group with regard to obstetric management. RESULTS: Five or more obstetrical maneuvers were used to deliver the infants in 82% in the obstetric brachial plexus palsy group versus 1.8% in the controls. Risk factors independently associated with obstetric brachial plexus palsy were force applied when downward traction was imposed on the fetal head (odds ratio 15.2; 95% confidence interval 8.4-27.7). The incidence of obstetric brachial plexus palsy in the infants in the population was 3.3 per thousand. At 18 months of age 16.1% (incidence of 0.05%) of children had residual functional deficits and downward traction with substantial force was applied in all these cases. CONCLUSIONS: Forceful downward traction applied to the head after the fetal third rotation represents an important risk factor of obstetric brachial plexus palsy in vaginal deliveries in cephalic presentation.

Publication Type
Journal Article. Research Support, Non-U.S. Gov't.

Result <9>
Unique Identifier
17195152
Authors
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Belfort, Michael A. Dildy, Gary A. Saade, George R. Suarez, Victor. Clark, Steven L.

Institution
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Title
Prediction of shoulder dystocia using multivariate analysis.

Source

Abstract
We evaluated the use of multivariate analysis in the prediction of shoulder dystocia (SD). One hundred consecutive cases with SD were matched with 100 controls without dystocia. All patients had term, vaginal delivery. Multivariate analysis was used to identify independent variables significantly related to shoulder dystocia. The regression coefficients for the identified factors were used to calculate a composite score from which receiver operating characteristics (ROC) curves were derived. Birthweight (BW), 1-hour Glucola (GLU), operative vaginal delivery (OVD), and height of fundus (HOF) were related independently to SD. The sensitivity and specificity reached 84 and 80%, respectively, with BW + GLU + OVD. Significant associations persisted when HOF and carbohydrate intolerance were substituted for BW and GLU, respectively. SD is independently associated with BW, GLU, and OVD, and may be predicted with clinically acceptable accuracy using multiple variables. This model may be useful in the design of prospective studies for managing suspected macrosomia.

Publication Type

Result <10>
Unique Identifier
17001555

Authors
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Institution
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Title
Shoulder dystocia at noninstrumental vaginal delivery.

Source

Abstract
This study examines the relationship between episiotomy and the occurrence of shoulder dystocia among noninstrumental vaginal deliveries. Analysis of data from a retrospective database was used to study noninstrumental vaginal deliveries in New Jersey during the years 1996 to 2001. The episiotomy group and nonepisiotomy group were analyzed separately using univariate and multivariate analysis. Among 358,664 deliveries, rate of shoulder dystocia was 1.0% (n = 3596). Thirty-five percent of deliveries were assisted by episiotomy. Rate of dystocia was 1.42% with the use of episiotomy, and 0.81% when episiotomy was not used. This increased rate with episiotomy was noted across all of the racial groups, all birthweight categories, and all of the risk factor subgroups analyzed. There was a gradual decrease in the use of episiotomy from 37.30 to 26.03% without a corresponding increase in the rate of dystocia. Among noninstrumental deliveries, the rate of shoulder dystocia is higher!
r in the episiotomy group. Decrease in the use of episiotomy has not resulted in an increase in the occurrence of dystocia.

Publication Type
Journal Article.

Result <11>
Unique Identifier
17054263
Authors
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Title
Intrapartum interventions for preventing shoulder dystocia. [Review] [36 refs]
Source
Abstract
BACKGROUND: The early management of shoulder dystocia involves the administration of various manoeuvres which aim to relieve the dystocia by manipulating the fetal shoulders and increasing the functional size of the maternal pelvis. OBJECTIVES: To assess the effects of prophylactic manoeuvres in preventing shoulder dystocia. SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (1 June 2006). SELECTION CRITERIA: Randomised controlled trials comparing the prophylactic implementation of manoeuvres and maternal positioning with routine or standard care. DATA COLLECTION AND ANALYSIS: Two review authors independently applied exclusion criteria, assessed trial quality and extracted data. MAIN RESULTS: Two trials were included; one comparing the McRobert's manoeuvre and suprapubic pressure with no prophylactic manoeuvres in 185 women likely to give birth to a large baby and one trial comparing the McRobert's manoeuvre and suprapubic pressure with no prophylactic manoeuvres in 185 women likely to give birth to a large baby and one trial comparing the use of the McRobert's manoeuvre versus lithotomy!

my positioning in 40 women. We decided not to pool the results of the two trials. One study reported fifteen cases of shoulder dystocia in the therapeutic (control) group compared to five in the prophylactic group (relative risk (RR) 0.44, 95% confidence interval (CI) 0.17 to 1.14) and the other study reported one episode of shoulder dystocia in both prophylactic and lithotomy groups. In the first study, there were significantly more caesarean sections in the prophylactic group and when these were included in the results, significantly fewer instances of shoulder dystocia were seen in the prophylactic group (RR 0.33, 95% CI 0.12 to 0.86). In this study, thirteen women in the control group required therapeutic manoeuvres after delivery of the fetal head compared to three in the treatment group (RR 0.31, 95% CI 0.09 to 1.02). One study reported no birth injuries or low Apgar scores recorded. In the other study, one infant in the control group had a brachial plexus injury (RR ! 0.44, 95% CI 0.02 to 10.61), and one infant had a five-minute Apgar score less than seven (RR 0.44, 95% CI 0.02 to 10.61). AUTHORS' CONCLUSIONS: There are no clear findings to support or refute the use of prophylactic manoeuvres to prevent shoulder dystocia, although one study showed an increased rate of caesareans in the prophylactic group. Both included studies failed to address important maternal outcomes such as maternal injury, psychological outcomes and satisfaction with birth. Due to the low incidence of shoulder dystocia, trials with larger sample sizes investigating the use of such manoeuvres are required. [References: 36]
Publication Type
Journal Article. Research Support, Non-U.S. Gov't. Review.

8/14/2007
Labor pains: unraveling the complexity of OB decision making. [Review] [37 refs]

Source

Abstract
While a discussion of technology and childbirth seems paradoxical, the use of statistical modeling can extend the capacity of the human mind to quantify risk, to communicate clearly, and to recognize when action is necessary in an obstetrical setting. These models provide clinicians envelopes that define safe and reasonable clinical paths. They obviate the myriad of environmental, experiential, and individual factors that inevitably affect the process of identifying and responding to unsafe situations. As the number of variables increases, the ability of the human mind to analyze multiple, interrelated factors diminishes and is not consistent across place and time. The top obstetrical problems leading to birth-related injury and litigation are discussed: shoulder dystocia, hypoxic ischemic encephalopathy, and prolonged or difficult labor. Two case histories are presented to demonstrate the factors promoting medical error and the application of these new technologies. [References: 37]

Publication Type
Case Reports. Journal Article. Review.

[Analysis of labour and perinatal complications in case of foetus weight over 4000 g]. [Polish]
The fetal macrosomia occurs in 3-15% pregnancies. It is recognized when foetus weight exceeds 4000 g in any period of pregnancy. Macrosomia can also be determined in case of foetus weight over 90 percentyl for the appropriate pregnancy period. The most detrimental foetal complications of macrosomia are: shoulder dystocia with Erb's brachial palsy, facial nerve palsy, clavicular and humeral bone fracture. The attempts in order to eliminate these complications lead to increase in the number of caesarean sections and labour inductions. Clinical examination and assessment of risk factors as well as ultrasonographic examination cannot exclude or confirm the possibility of macrosomia with sufficient specificity and sensitivity. On the other hand it is well known that delivery of macrosomic foetus is not always associated with perinatal complications. The aim of the study was to assess the risk of perinatal complication in foetuses with large birth weight.

**MATERIAL AND METHODS:**

In a case-control study the data from medical records of 652 newborns with birth weight over 4000 g were analysed. Only single born at term foetuses in cephalic presentation were included into the analysis.

**RESULTS:**

The Erb's brachial palsy, clavicular bone fracture, shoulder dystocia and convulsions in newborn were significantly associated with excessive fetal weight. Shoulder dystocia, clavicular bone fracture and brachial palsy were more frequent in group of newborns with birth weight over 4500 g. The frequency of brachial dystocia and its complications (clavicular bone fracture and Erb's brachial palsy) were significantly connected with the use of VE.

**CONCLUSIONS:**

Significant increase in the frequency of perinatal complications in foetuses with birth weight over 4500 g indicates the necessity of considering caesarean section as a favourable mode of delivery.
raction forces), were present in all cases. The higher incidence of deformation in patients with obstetrical brachial plexus palsy born by cesarean sections and the presence of two presumptive mechanisms in all of the cases presented here raises the possibility that fetal deformations are a risk factor for obstetrical brachial plexus palsy.

Publications

Result <15>
Unique Identifier
16949426

Authors
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Title
The relationship of fetal position and ethnicity with shoulder dystocia and birth injury.

Source

Local Messages
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.

Abstract
OBJECTIVE: The objective of this study was to examine factors associated with the occurrence of shoulder dystocia and subsequent perinatal outcomes. STUDY DESIGN: We conducted a retrospective cohort study of 29,612 consecutive term, singleton, vertex vaginal deliveries. The primary outcome was reported shoulder dystocia. Fetal position, ethnicity, and their interaction terms were examined along with maternal characteristics, induction and length of labor, operative vaginal delivery, epidural, and birth weight in both bivariate and multivariate analyses. RESULTS: Among women who met study criteria, 524 (1.8%) experienced a shoulder dystocia. African American women had the highest risk of shoulder dystocia (2.6%), compared with other races/ethnicities (P = .001). Women who delivered in occiput posterior position were noted to have a lower risk for shoulder dystocia (1.1%) as compared with occiput anterior position (1.8%, P = .046). However, in the setting of a shoulder dystocia, a higher risk of brachial plexus injury was observed in neonates delivered in occiput posterior position (adjusted odds ratio 10.4, 95% confidence interval 3.03 to 35.88) by vacuum-assisted vaginal delivery (adjusted odds ratio 3.24, 95% confidence interval 1.37 to 7.67) and neonates weighing 4000 g or more (adjusted odds ratio 2.53, 95% confidence interval 1.09 to 5.85). CONCLUSION: Overall African American women have an increased risk of shoulder dystocia, but their neonates are not more likely to experience birth injury. Although occiput posterior position has a protective effect for shoulder dystocia, the risk of brachial plexus injury is increased in the setting of a persistent occiput posterior delivery. These factors should be used to consider a patient's prospective risk for shoulder dystocia and associated outcomes.

Publications

Result <16>
OBJECTIVE: Much of our understanding and knowledge of shoulder dystocia has been blurred by inconsistent and scientific studies that are of limited scientific quality. In an evidence-based format, we sought to answer the following questions: (1) Is shoulder dystocia predictable? (2) Can shoulder dystocia be prevented? (3) When shoulder dystocia does occur, what maneuvers should be performed? and (4) What are the sequelae of shoulder dystocia? STUDY DESIGN: Electronic databases, including PUBMED and the Cochrane Database, were searched using the key word “shoulder dystocia.” We also performed a manual review of articles included in the bibliographies of these selected articles to further define articles for review. Only those articles published in the English language were eligible for inclusion. RESULTS: There is a significantly increased risk of shoulder dystocia as birth weight linearly increases. From a prospective point of view, however, prepregnancy and antepartum risk factors have exceedingly poor predictive value for the prediction of shoulder dystocia. Late pregnancy ultrasound likewise displays low sensitivity, decreasing accuracy with increasing birth weight, and an overall tendency to overestimate the birth weight. Induction of labor for suspected fetal macrosomia has not been shown to alter the incidence of shoulder dystocia among nondiabetic patients. The concept of prophylactic cesarean delivery as a means to prevent shoulder dystocia and therefore avoid brachial plexus injury has not been supported by either clinical or theoretic data. Although many maneuvers have been described for the successful alleviation of shoulder dystocia, there have been no randomized controlled trials or laboratory experiments that have directly compared these techniques. Despite the introduction of ancillary obstetric maneuvers, such as McRoberts maneuver and a generalized trend towards the avoidance of fundal pressure, it has been shown that the rate of shoulder-dystocia associated brachial plexus palsy has not decreased. The simple occurrence of a shoulder dystocia event before any iatrogenic intervention may be associated with brachial plexus injury. CONCLUSION: For many years, long-standing opinions based solely on empiric reasoning have dictated our understanding of the detailed aspects of shoulder dystocia prevention and management. Despite its infrequent occurrence, all healthcare providers attending pregnancies must be prepared to handle vaginal deliveries complicated by shoulder dystocia. [References: 121]
Induction of labor rates have more than doubled nationwide in the past 15 years. The increase in medically induced inductions was slower than the overall increase, suggesting that inductions for marginal or elective reasons rose more rapidly. Elective inductions seem to account for at least half of all inductions and 10% of all deliveries. Whether the experience of an elective induction is satisfactory to the patient, obstetrician, and intrapartum crew warrants more widespread attention. Cesarean rates are high for nulliparas undergoing an induction with an unfavorable cervix. Prospective studies are limited or nonexistent to recommend induction of labor for elective or marginal indications. Until more prospective work is performed, it will be difficult to evaluate the true impact of the elective induction of labor on population-wide cesarean delivery rates. Strategies for increased obstetrician awareness are proposed through practice guidelines and through clinical research. [References: 28]
Publication Type
Journal Article. Review.

Result <19>
Unique Identifier 16753711
Authors Khunda A.
Authors Full Name Khunda, A.
Title Congenital brachial plexus palsy. [comment].
Publication Type Comment. Letter.

Result <20>
Unique Identifier 16740808
Authors Joyner B. Soto MA. Adam HM.
Authors Full Name Joyner, Benny. Soto, Mary Ann. Adam, Henry M.
Institution Children's Hospital at Montefiore, Bronx, NY, USA.
Title Brachial plexus injury. [Review] [0 refs]
Publication Type Journal Article. Review.

Result <21>
Unique Identifier 16407959
Authors Mehta SH. Blackwell SC. Bujold E. Sokol RJ.

8/14/2007
Authors Full Name
Mehta, S H. Blackwell, S C. Bujold, E. Sokol, R J.
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Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, Hutzel Hospital, Wayne State University, Detroit, MI, USA. smehta@med.wayne.edu
Title
What factors are associated with neonatal injury following shoulder dystocia?.
Source
Abstract
OBJECTIVE: To identify factors associated with the development of neonatal injury in the setting of shoulder dystocia. STUDY DESIGN: Medical record ICD-9 codes and a computerized perinatal database were reviewed to identify cases of shoulder dystocia from January 1996 to January 2001 in a tertiary care center. For confirmation of the diagnosis and collection of data, both maternal and neonatal charts were then reviewed and neonatal injuries categorized as either neurological (brachial plexus injury) or skeletal (clavicular fracture, humeral fracture). Shoulder dystocia cases were divided into groups based on the presence of neonatal injury at delivery or at discharge (with or without Erb's palsy). The group with neonatal injury was compared for demographic and obstetrical factors to the group without injury (control). chi (2) test, Mann-Whitney test and logistic regression were used as appropriate. RESULTS: During this 5-year period, there were 25,995 deliveries and 206 (0.8%) confirmed cases of shoulder dystocia. Of these cases, 36 (17.5%) had neonatal injury diagnosed at delivery and 25 (12%) remained with significant residual injury at discharge. Of these there were 19 cases of Erb's palsy and six cases of clavicular fracture. No association was found between neonatal injury and maternal age, ethnicity, diabetes, operative vaginal delivery or number of obstetrical maneuvers. However, maternal body mass index >30 kg/m2, a second stage of labor >20 min and a birth weight >4500 g were all associated with an increased risk of neonatal injury at delivery and at discharge, including Erb's palsy. After logistic regression analysis, only a second stage of delivery >20 min remained significantly associated with neonatal injury at discharge. CONCLUSION: In our population, maternal obesity was associated with an increased risk of neonatal injury after shoulder dystocia. In addition, a short second stage of labor (<20 min) was associated with a lower rate of neonatal injury.
Publication Type
Journal Article.
Result <22>
Unique Identifier
16390789
Authors
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Title
Trends in the rate of shoulder dystocia over two decades.[see comment].
Comments
Comment in: J Matern Fetal Neonatal Med. 2006 May;19(5):315; author reply 315-6; PMID: 16753774

8/14/2007
OBJECTIVE: To describe the trend in the rate of shoulder dystocia over twenty-four years and identify the risk factors related to the occurrence of dystocia.

METHODS: Data was obtained from Maryland State regarding all vaginal deliveries that occurred during six different time periods at five-year intervals since 1979. Trends in the rate of shoulder dystocia, episiotomy, forceps and vacuum delivery were examined. RESULTS: There were a total of 277,974 vaginal deliveries. The overall rate of shoulder dystocia was 1.29% (n = 3590). Induction of labor (adjusted OR 1.2, 1.1-1.3), presence of diabetes (gestational (OR 1.9, 1.7-2.3) or pregestational (OR 3.8, 2.7-5.4)), fetal macrosomia (OR 5.1, 4.1-6.3) use of episiotomy (OR 1.6, 1.5-1.8), forceps (OR 1.3, 1.0-1.8) or vacuum (OR 2.3, 2.0-3.9) at delivery were associated with a higher rate of shoulder dystocia. TREND: There was an increase in the rate of shoulder dystocia from 0.2% in 1979 to 2.11% in 2003. In addition there was a drop in the overall episiotomy rate from 73.67% to 23.94% and an increase in the use of vacuum from 0.1% to 8.36%. CONCLUSION: The rate of shoulder dystocia has increased by 10 fold during the study period. The use of episiotomy either at spontaneous delivery or instrumental delivery does not appear to decrease the occurrence of shoulder dystocia.

Publication Type
Journal Article.

Result <23>
Unique Identifier
16260506

Risk factors for obstetric brachial plexus palsy among neonates delivered by vacuum extraction.

Obstetrics & Gynecology. 106(5 Pt 1):913-8, 2005 Nov.

Abstract
OBJECTIVE: The risk of obstetric brachial plexus palsy (OBPP) is increased in infants delivered instrumentally. The aim of this study was to identify risk factors for OBPP and to evaluate the association between possible risk factors linked to the duration of the vacuum extraction procedure and the subsequent risk. METHODS: A population-based retrospective design was adopted. Using a national registry of operative vaginal deliveries linked to the Medical Birth Registry in Sweden, we evaluated by univariate and multiple logistic regression analyses the risk factors for OBPP in 13,716 women delivered by vacuum extraction. The variables assessed in the multiple logistic regression analysis were shoulder dystocia, fetal birth weight of 3,999 g or greater, fundal pressure, number of tractions, vacuum application time, parity, vacuum silicone cup, epidural anesthesia, and fetal head at the level of the ischial spines at vacuum application time. RESULTS: Obstetric brachial plexus!
Shoulder dystocia was recorded in 153 (1.1%) infants. The following variables increased significantly the risk of OBPP in the newborn: shoulder dystocia (odds ratio 16.0; 95% confidence interval 8.9-28.7), fetal birth weight of 3,999 g or greater (7.1; 4.8-10.5), and administration of fundal pressure (1.6; 1.1-2.3). The probability of the risk of OBPP in vacuum-assisted deliveries increased in relation to vacuum extraction time (minutes). CONCLUSION: Shoulder dystocia in the setting of vacuum extraction is a prominent risk factor for OBPP in the newborn. The risk of OBPP increases with the time required for vacuum extraction. LEVEL OF EVIDENCE: II-3.
Authors Full Name  
Dandolu, Vani. Brown, Raymond.

Title  
The importance of proper study design.[comment].

Comments  

Source  

Local Messages  
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.

Publication Type  
Comment. Letter.

Result <26>

Unique Identifier  
16093457

Authors  
Sandberg-Wollheim M. Frank D. Goodwin TM. Giesser B. Lopez-Bresnahan M. Stam-Moraga M. Chang P. Francis GS.

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Title  
Pregnancy outcomes during treatment with interferon beta-1a in patients with multiple sclerosis.[see comment]. [Review] [36 refs]

Comments  
Comment in: Neurology. 2005 Sep 27;65(6):788-9; PMID: 16186513

Source  
Neurology. 65(6):802-6, 2005 Sep 27.

Local Messages  
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.

Abstract  
BACKGROUND: Although patients with multiple sclerosis (MS) are advised to stop interferon (IFN) beta-1a therapy before becoming pregnant, some patients become pregnant while on treatment. METHODS: We examined individual patient data from eight clinical trials with IFNbeta-1a. RESULTS: Of 3,361 women in the studies, 69 pregnancies were reported, of which 41 were patients receiving (or who had stopped receiving within 2 weeks prior to conception) IFNbeta-1a (in utero exposure group), 22 were patients who discontinued IFNbeta-1a treatment more than 2 weeks before conception (previous exposure group), and six were patients receiving placebo. The 41 in utero exposure pregnancies resulted in 20 healthy full-term infants, one healthy premature infant, nine induced abortions, eight spontaneous abortions, one fetal death, and one congenital anomaly (hydrocephalus). One patient was lost to follow-up. The 22 previous exposure pregnancies resulted in 20 full-term healthy infants, one !

healthy premature infant, and one birth-related congenital anomaly (Erb palsy). CONCLUSIONS: The majority (21/31) of pregnancies that had the potential to go to full term produced healthy infants. The rate of spontaneous abortion was higher, but not significantly so, in the in utero exposure group compared to general

8/14/2007
population estimates. Until more exposure data become available, patients remain advised to stop IFNbeta therapy before becoming pregnant. [References: 36]

Result <27>
Unique Identifier
16157107
Authors
Herbst MA.
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Institution
Department of Obstetrics and Gynecology, MetroHealth Medical Center, Case Western Reserve University School of Medicine, Cleveland, OH, USA.
Title
Treatment of suspected fetal macrosomia: a cost-effectiveness analysis.
Source
Local Messages
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.
Abstract
OBJECTIVE: Treatment of fetal macrosomia presents challenges to practitioners because a potential outcome of shoulder dystocia with permanent brachial plexus injury is costly both to families and to society. Practitioner options include labor induction, elective cesarean delivery, or expectant treatment. We performed a cost-effective analysis to evaluate the treatment strategies that were preferred to prevent the most permanent brachial plexus injuries with the least amount of dollars spent. STUDY DESIGN: Using decision analysis techniques, we compared 3 strategies for an infant with an estimated fetal weight of 4500 g: labor induction, elective cesarean delivery, and expectant treatment. The following baseline assumptions were made: Probability of shoulder dystocia in vaginal delivery,.145; labor induction,.03; cesarean delivery,.001; probability of plexus injury,.18; probability of permanent injury,.067; probability of cesarean delivery with induction,.35; with exp!
extant treatment,.33; cost of vaginal delivery, dollar 3376; cost of elective cesarean delivery, dollar 5200; cost of cesarean delivery with labor, dollar 6500; lifetime cost of brachial plexus injury, dollar 1,000,000. Sensitivity analyses were performed. RESULTS: Under baseline assumptions for an infant who weighs 4500 g, expectant treatment is the preferred strategy at a cost of dollar 4014.33 per injury-free child, compared with elective cesarean delivery at a cost of dollar 4014.33 and an induction cost of dollar 5165.08. Sensitivity analyses revealed that, if the incidence of shoulder dystocia and permanent injury remained <10%, expectant treatment is the preferred method. CONCLUSION: Fetal macrosomia with possible permanent plexus injuries is a concern. Our analysis would suggest that expectant treatment is the most cost-effective approach to this problem.

Result <28>
Unique Identifier
16125601
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8/14/2007
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Title
Peripheral nerve injury evaluation and management. [Review] [20 refs]
Source
Local Messages
Jewish HSL owns this journal. Please refer to library intranet pages or contact library staff for specific holdings information.
Publication Type
Result <29>
Unique Identifier
16098852
Authors
Chauhan SP. Grobman WA. Gherman RA. Chauhan VB. Chang G. Magann EF. Hendrix NW.
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Title
Suspicion and treatment of the macrosomic fetus: a review.[see comment]. [Review] [118 refs]
Comments
Comment in: Am J Obstet Gynecol. 2006 Sep;195(3):879-80; author reply 880-1; PMID: 16579927
Source
Local Messages
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.
Abstract
OBJECTIVE: To review the prevalence of and our ability to identify macrosomic (birthweight >4000 g) fetuses. Additionally, based on the current evidence, propose an algorithm for treatment of suspected macrosomia. STUDY DESIGN: A review. RESULTS: According to the National Vital Statistics, in the United States, the prevalence of newborns weighing at least 4000 g has decreased by 10% in seven years (10.2% in 1996 and 9.2% in 2002) and 19% for newborns with weights >5000 g (0.16% and 0.13%, respectively). Bayesian calculations indicates that the posttest probability of detecting a macrosomic fetus in an uncomplicated pregnancy is variable, ranging from 15% to 79% with sonographic estimates of birth weight, and 40 to 52% with clinical estimates. Among diabetic patients the post-test probability of identifying a newborn weighing >4000 g clinically and sonographically is over 60%. Among uncomplicated pregnancies, there is sufficient evidence that suspected macrosomia is not an indication for induction or for primary cesarean delivery. For pregnancies complicated by diabetes, with a prior cesarean delivery or shoulder dystocia, delivery of a
macrosomic fetus increases the rate of complications, but there is insufficient evidence about the threshold of estimated fetal weight that should prompt cesarean delivery. CONCLUSION: Due to the inaccuracies, among uncomplicated pregnancies suspicion of macrosomia is not an indication for induction or for primary cesarean delivery. [References: 118]

Publication Type
Journal Article. Review.

Result <30>
Unique Identifier
16013178
Authors
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Title
[Analysis of risk factors for perinatal brachial plexus palsy]. [Polish]
Source
Ginekologia Polska. 76(4):270-6, 2005 Apr.
Abstract
OBJECTIVES AND DESIGN: Risk factors of obstetrical brachial plexus palsy include: (1) large birth weight, (2) shoulder dystocia and prolonged second stage of labour, (3) instrumental vaginal delivery (forceps delivery, vacuum extraction), (4) diabetes mellitus and mother's obesity, (5) breech presentation, (6) delivery and infant with obstetrical brachial plexus palsy in antecedent delivery. The purpose was analysis of the classical risk factors for brachial plexus palsy based on our own clinical material. MATERIAL AND METHODS: Clinical material consists of 83 children with obstetrical brachial plexus palsy treated at the Department of Trauma and Hand Surgery (surgically--54, conservatively--29). Control group consists of 56 healthy newborns. Data recorded included: birth weight, body length, head and chest circumference, Apgar test at 1 min., type of brachial palsy and side affected, type of birth, presentation, duration of delivery (II stage), age of mother, mother's dis!
eases, parity. RESULTS: The infants treated surgically have had a significantly higher birth weight, body height, head and chest circumference, in compression with control group and group treated conservatively. The differences were statistically important. Shoulder dystocia occurred in 32.9% of all vaginal delivery. Instrumental vaginal delivery was observed in 11.3% and breech presentation in 4.9% cases. There were no incidences of obstetrical brachial plexus palsy recurrence. Diabetes mellitus and mother's obesity was found in 3 cases. CONCLUSIONS: (1) Fetal macrosomia is the important risk factor of the obstetrical brachial plexus palsy. (2) Obstetrical brachial plexus palsy may occur also in the absence of the classical risk factors.

Publication Type

Result <31>
Unique Identifier
15970839
Authors
Mehta SH. Blackwell SC. Hendler I. Bujold E. Sorokin Y. Ager J. Kraemer T. Sokol RJ.

8/14/2007
OBJECTIVE: This study was undertaken to determine whether there is any difference in the rate of error of estimated fetal weight (EFW) in cases of shoulder dystocia compared with controls. STUDY DESIGN: Women whose delivery was complicated by shoulder dystocia were studied and compared with a control group matched for parity, race, labor type (spontaneous or induced), and birth weight (BW). Accuracy (%) was defined as \[\frac{(\text{EFW} - \text{BW})}{\text{BW}} \times 100\]. The primary outcome of the study was rate of EFW underestimation error 20% or greater. RESULTS: During the 5-year study period, there were 206 cases of shoulder dystocia that met all study criteria. There was no difference in the number of patients that had EFW underestimation error 20% or greater (shoulder dystocia 9.8% vs control 12.8%; P = .38). There was also no difference in the number of patients that had EFW underestimation error 20% or greater between shoulder dystocia with and without injury (injury 8.3% vs no injury 7.1%; P = .7).

CONCLUSION: EFW underestimation error in cases of shoulder dystocia is an infrequent event and does not occur more often than in deliveries without shoulder dystocia.
Abstract

OBJECTIVE: The purpose of this study was to analyze the data on brachial plexus injury and its relationship with shoulder dystocia from a tertiary center for a 23-year period. STUDY DESIGN: A review of the logbooks on labor and delivery and the nursery and the International Classification of Diseases codes identified all newborn infants with brachial plexus injury who were delivered at our center. RESULTS: During the 23 years (1980-2002), there were 89,978 deliveries, of which there were 85 cases of brachial plexus injury (1/1000 births) with vaginal delivery. The injury was permanent (> or =1 year) in 12% of the cases, and only 2 cases have been litigated. Newborn infants that weighed > or =4 kg were significantly more common among those infants who had shoulder dystocia and brachial plexus injury than those infants without injury (odds ratio, 6.55; 95% CI, 2.30, 18.63). The rate of permanent brachial plexus injury was similar between the 2 groups. CONCLUSION: A case of brachial plexus injury occurs 1 time in every 1000 births, is permanent in 1 of every 10,000 deliveries, and is litigated 1 time for every 45,000 deliveries. The infrequent nature of injury may preclude prevention.

Result <33>
Unique Identifier
15954875
Authors
Mollberg M. Hagberg H. Bager B. Lilja H. Ladfors L.
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Title
High birthweight and shoulder dystocia: the strongest risk factors for obstetrical brachial plexus palsy in a Swedish population-based study.
Source
Local Messages
Christ Hospital Medical Library owns this journal. Please refer to library intranet pages or contact library staff for specific holdings information.

Abstract

BACKGROUND: Obstetrical brachial plexus palsy (OBPP) is a serious form of neonatal morbidity. OBJECTIVE: The aim of this work was to study the incidence of OBPP and to analyze its risk factors. METHODS: This is a population-based retrospective case-control study. All deliveries recorded in the Swedish Medical Birth Registry between 1987 and 1997 (n = 1 213 987) were investigated. Cases (n = 2399) with OBPP were compared to all other cases. RESULTS: The incidence of OBPP increased from 0.17 in 1987 to 0.27% in 1997 (p = 0.002). During the same time period, the mean birthweight increased from 3483 to 3525 g. Birthweight increasing from 4000 g was associated with a progressive rise in OBPP risk. Other significant risk factors associated with the injury were shoulder dystocia, breech presentation in vaginal delivery, operative vaginal delivery, diabetes mellitus, induction of labor, protracted active phase, secondary arrest of dilatation, and epidural anesthesia. Cesarean sect! ion was associated with a decreased risk of OBPP. If 5000 g is chosen as cut-off for cesarean section, 85% of the infants in this weight class are underestimated using ultrasonography. Approximately, 331 abdominal deliveries have to be performed to avoid one case of OBPP. CONCLUSIONS: Shoulder dystocia and infant birthweight of 4500 g and more are the strongest risk factors for OBPP in a Swedish population.
OBJECTIVE: To determine the effect of extreme macrosomia on perinatal outcome. METHODS: We conducted a retrospective review of all deliveries with birth weight ≥ 5000 g in a tertiary centre from 1986 to 2000 and analyzed the method of delivery and perinatal outcome. RESULTS: Extreme macrosomia (birth weight ≥ 5000 g) was coded in 111 deliveries. There were 62 deliveries by Caesarean section (CS) (25 in labour and 37 elective). The 49 vaginal deliveries were complicated by 10 (20%) cases of shoulder dystocia and 3 (6%) of Erb's palsy. Permanent Erb's palsy was noted in only 1 of these 3 cases. Shoulder dystocia was associated with use of oxytocin and instrumental deliveries. CONCLUSION: Implementing the 2002 guidelines from the American College of Obstetricians and Gynecologists (that is, recommending Caesarean delivery of fetuses with an estimated weight of at least 5000 g) would have a negligible effect on the CS rate while eliminating 10 cases of shoulder dystocia in 49 births. A policy eliminating the use of oxytocin and instrumental deliveries would have prevented most birth traumas in this group. Unfortunately, this high-risk group is difficult to identify in the antepartum period, complicating the implementation of these guidelines and probably leading to higher rates of CS. In addition, the effect of endorsing such a policy on overall neonatal and maternal morbidity is minimal, because most morbidity occurs in newborns weighing less than 4000 g.
Birth injuries of the brachial plexus are fairly common, but the majority of affected newborns make quick recoveries without any specific intervention. A minority suffer more severe injuries that lead to varying degrees of life-long disability. Happily, modern microsurgical techniques permit reconstruction of certain plexus injuries and, in carefully selected patients, can restore voluntary activity to target muscle groups. To what degree reanimation of paralyzed muscles improves function and quality of life for these children is a more important matter that has not yet been addressed at the level of modern standards of evidence. Brachial plexus reconstruction is only a first step in the multidisciplinary process needed to optimize long-term functional outcomes for severely affected infants.

[References: 103]
Mode of delivery and birth outcomes of macrosomic infants. [Review] [56 refs]

Abstract
This review examines and summarises the literature regarding the mode of delivery of macrosomic infants and subsequent perinatal outcomes. A search of electronic databases was conducted and supplemented with investigation of the references cited in the original articles. Although the rates of obstetric complications differ among high birth weight infants delivered by caesarean section compared to those delivered vaginally, there is currently little evidence that perinatal mortality differs significantly by delivery method. Shoulder dystocia and birth injury occur with greater frequency among macrosomic infants, yet the relative inaccuracy of clinical and ultrasonographic estimates of birth weight among high birth weight infants indicates that a trial of labour may be warranted among non-diabetic mothers with a suspected macrosomic fetus. The majority of studies identified in this review utilised small sample sizes and observational design, thereby hindering valid assessments of the impact of delivery method on the mortality of this population. Consequently, an optimal management strategy has yet to be defined. [References: 56]

The role of electromyography in the management of obstetric brachial plexus palsies. [Review] [58 refs]
Cesarean section is commonly perceived as a simple and safe alternative to difficult vaginal birth. However, several trends in obstetrical practice may act in concert to cause impaction of the fetal head during the second stage of labor or, more commonly, following failed instrumental delivery. Subsequently, difficult and potentially traumatic disengagement of the deeply wedged head during cesarean section occurs. The maneuvers to disengage the wedged head include pushing (bimanual or by an assistant) the head through the vagina or, alternatively, pulling the infant’s feet through the uterine incision. Although both methods may cause serious maternal and neonatal complications, available data seem to favor the pulling method and better outcome seems to depend on adequate uterine relaxation, the patient’s position during operation, and special attention to the uterine incision. More data are needed to establish the frequency and extent of intraoperative disengagement dystocia and to determine the management protocol that carries the lowest risk in such circumstances. [References: 23]
Litigation and the midwife: shoulder dystocia. [Review] [19 refs]
Source
Practising Midwife. 7(10):24, 26-7, 2004 Nov.
Publication Type
Journal Article. Review.

Result <41>
Unique Identifier
15062677
Authors
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Title
Birth injuries of the brachial plexus. [Review] [103 refs]
Source
Local Messages
Christ Hospital Medical Library owns this journal. Please refer to library intranet pages or contact library staff for specific holdings information.
Abstract
Birth injuries of the brachial plexus are fairly common, but most affected newborns make quick recoveries without any specific intervention. A minority suffer more severe injuries that lead to varying degrees of life-long disability. Modern microsurgical techniques permit reconstruction of certain plexus injuries and, in carefully selected patients, can restore voluntary activity to target muscle groups. The degree to which reanimation of paralyzed muscles improves function and quality of life for these children is a more important matter that has not yet been addressed using modern standards of evidence. Brachial plexus reconstruction is only a first step in the multidisciplinary process needed to optimize long-term functional outcomes for severely affected infants. [References: 103]
Publication Type
Journal Article. Review.

Result <42>
Unique Identifier
15147855
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Title
Obstructed labor: using better technologies to reduce mortality. [Review] [65 refs]

Source

Abstract
OBJECTIVE: To identify, from the best available evidence, underutilized and promising technologies that may reduce maternal mortality from obstructed labor.
METHODS: The author sought systematic reviews of randomized trials, individual randomized trials, and, in the absence of randomized data, non-randomized studies and clinical consensus. Data were presented according to the level of the evidence. RESULTS: Obstructed labor causes approximately 8% of maternal deaths, and indirectly contributes to a greater percentage. Proven or widely accepted technologies that help reduce mortality from obstructed labor include contraception, external cephalic version, the partogram, augmentation of labor, selective amniotomy, selective episiotomy, vacuum extraction, caesarean section, symphysiotomy, and destructive procedures for non-viable fetuses. Technologies of uncertain usefulness include maternal height and shoe size, vaginal cleansing, upright posture for delivery and vaginal lubrication. Unuseful technologies include pelvimetry, estimating fetal weight, early labor induction, routine amniotomy and augmentation, routine episiotomy, and starvation during labor. CONCLUSION: Access to well-established technologies, particularly safe caesarean section, can reduce maternal mortality in resource-poor countries. [References: 65]

Publication Type
Journal Article. Review.

Result <43>
Unique Identifier
12889593

Authors
Thom EA. Rouse DJ. National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network.

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Title
What we have learned about conducting randomized controlled trials in the NICHD MFMU network. [Review] [17 refs]

Source

Abstract
The National Institute of Child Health and Human Development (NICHD) created the NICHD Maternal Fetal Medicine Units Network in 1986 to conduct randomized trials and observational studies in perinatal medicine to improve adverse pregnancy and infant outcomes. From 1986 to 2002, the Network has started 16 randomized trials. Five of the trials are described, with particular attention given to difficult issues that arose, such as feasibility, sample size estimation, randomization in very high risk pregnancies, changing clinical practice, importance of the study question to the investigators, and lack of recruitment. Changes that the Network group made to their organization and methodology as a result of these issues are described, together with their application to some of the other trials proposed and conducted by the group. [References: 17]

Publication Type
Obstetrical brachial plexus palsy. [Review] [13 refs]


Local Messages

Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.

Abstract

Since the days of Hippocrates, scripts have included descriptions of infants who were unable to move their arms. However, it was not until the mid-1700s that an obstetric cause for the paralysis was considered. In 1872, the term obstetrical brachial plexus palsy was coined when a correlation was made between excessive traction on the brachial plexus during delivery and the clinical finding of arm paralysis. Surgical intervention became the norm in the beginning of the 19th century and continued until 1930. Poor outcomes and spontaneous resolution of obstetrical brachial plexus palsy prompted a 40-year span of conservative treatment. By the late 1960s, advances in technology and microsurgical techniques revived interest in surgical intervention in the management of obstetrical brachial plexus palsy. This article focuses on obstetrically caused brachial plexus injury, including risk factors, clinical presentation, and treatment options and outcomes. An understanding of current medical practices and their outcomes also provides a basis on which to develop sound support strategies to help parents who face this dilemma. [References: 13]

A Darwinian view of obstructed labor. [Review] [16 refs]

Local Messages
Both Christ and Jewish libraries own this journal. Please refer to the library intranet pages or contact the library staff for specific holdings information.

Abstract
This essay discusses the evolutionary biology of dystocia. From a Darwinian standpoint, the high frequency of dystocia observed today seems evolutionarily untenable. Hunter-gatherers, most notably the Inuit, appear not to suffer from dystocia. It may be that people from an agriculture-based background are, obstetrically speaking, less well adapted to the good nutrition of a modern affluent diet. [References: 16]

Publication Type
Journal Article. Review.

Result <46>
Unique Identifier
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Authors
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Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA.
Title
Choosing route of delivery for the macrosomic infant of a diabetic mother: Cesarean section versus vaginal delivery. [Review] [34 refs]
Source
Abstract
The macrosomic fetus of a diabetic woman faces increased risk for injury at the time of vaginal birth. Cesarean section offers the promise of avoiding trauma to the fetus, but can result in increased morbidity in the mother as compared to vaginal delivery. In this article, the advantages and disadvantages of the two routes of delivery for the overgrown fetus of a diabetic mother are discussed. Specifically, data regarding risk of permanent neurological damage to the infant from vaginal delivery, and maternal morbidity from elective, pre-labor Cesarean delivery are critically examined. In addition, methods for diagnosing macrosomia by ultrasound are discussed, along with the benefits and pitfalls of ultrasonic fetal weight estimation in the setting of diabetes. Finally, management approaches for selecting route of delivery for the macrosomic fetus are described and analyzed. [References: 34]
Publication Type
Journal Article. Review.

Result <47>
Unique Identifier
12683658
Authors
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8/14/2007
Induction of labor versus conservative management of pregnant diabetic women. [Review] [26 refs]


Abstract
Reasons for inducing labor at term in pregnancies complicated by diabetes include the avoidance of fetal demise and the prevention of excessive fetal growth and its concomitant conditions, shoulder dystocia and Cesarean delivery. Objectively evaluating the risks and benefits of labor induction is potentially confounded by the status of the cervix at the time of initiation of induction, early determination of an arrest disorder and physician bias toward Cesarean delivery for women who have diabetes. In non-diabetic women, incorporating estimates of fetal weight in deciding the route of delivery has not diminished the incidence of shoulder dystocia, and may have increased the incidence of Cesarean deliveries. Currently available evidence suggests that, while induction of labor for women who have diabetes may not carry much maternal or fetal risk, the benefit of this procedure is unclear. [References: 26]
Title
Delivery of the macrosomic infant: cesarean section versus vaginal delivery. [Review] [35 refs]
Source
Abstract
The macrosomic fetus of a diabetic woman faces increased risk for injury at the time of birth. Cesarean section offers the potential for avoiding trauma to the fetus, but can result in increased morbidity in the mother as compared to vaginal delivery. In this article, the advantages and disadvantages of the 2 routes of delivery for the overgrown fetus of a diabetic mother are discussed. In addition, methods for diagnosing macrosomia by ultrasound are examined, along with the benefits and pitfalls of ultrasonic fetal weight estimation in the setting of diabetes. Finally, management approaches for selecting route of delivery for the macrosomic fetus are described and analyzed. [References: 35]

Result <50>
Unique Identifier
12048394
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Title
Shoulder dystocia: an evidence-based evaluation of the obstetric nightmare. [Review] [105 refs]
Source

Result <51>
Unique Identifier
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Authors Full Name
Baskett, Thomas F.
Institution

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Shoulder dystocia is an uncommon but not rare obstetric emergency. Death of the infant is unusual but perinatal morbidity is frequent and can result in permanent injury. These cases carry significant medico-legal implications. This chapter covers the mechanisms, predisposing factors and management of shoulder dystocia. A well-rehearsed sequence of manoeuvres to manage shoulder dystocia will minimize fetal trauma. Copyright 2002 Elsevier Science Ltd. [References: 68]

A better understanding of the forces involved when brachial plexus injury occurs has evolved over the past 10 to 15 years. A particular challenge was that all of the useful information had to be derived indirectly by identifying associations—a challenge that was met by individual researchers who made significant observations that, in turn, stimulated others to search for additional findings. Gradually the pieces of the puzzle began to form the picture. The significant steps in this journey were first, the recognition of the substantial number of injuries occurring without concurrent shoulder dystocia; second, the finding that a much greater frequency of injury is associated with an ultrashort second stage of labor; third, the observations that the injury rate is independent of the experience of the birth attendant; fourth, the recognition of the substantial numbers of injuries occurring in the posterior arm; and fifth, the anecdotal experience of countless delivery attendants, who relate that the forces applied in the injured cases were perceived to be no stronger than those applied when no injury occurred. We present a historical review for each step in this journey. We reviewed all articles published on this subject in Obstetrics and Gynecology and the American Journal of Obstetrics and Gynecology and some European journals. The period for review primarily covered articles published since 1980. Several textbooks on obstetrics and child neurology were also reviewed. [References: 22]
Caesarean section rates are rising. Caesarean section confers an increase in maternal mortality and morbidity as well as having considerable financial implications. Caesarean section is usually justified by the assumed benefit for the fetus. These benefits are often unquantified and based on scanty evidence. The changing trends in the rates of caesarean section for various indications may be explained partly by improved anaesthetic and neonatal techniques. Cultural changes and expectations in the general population and obstetricians' fear of litigation may have made the changing rate and indications for caesarean section seem more acceptable. There is little research evidence in this area. The evidence that caesarean section is the optimal mode of delivery for various major indications is critically examined. The obstetrician is under an obligation to share the evidence that caesarean section is the optimum mode of delivery with the pregnant woman and her birth attendants to allow the woman to make wise decisions about her management. Copyright 2001 Harcourt Publishers Ltd.
Obstructed labor is one of the most common preventable causes of maternal and perinatal morbidity and mortality in developing countries. Among the common causes are cephalopelvic disproportion, malpresentation, and malposition. Recognizing the causes of obstructed labor is important if the complications are to be prevented. Adequate prevention, however, can be achieved only through a multidisciplinary approach aimed in the short term at identifying high-risk cases and in the long term at improving nutrition. Early motherhood should be discouraged, and efforts are needed to improve nutrition during infancy, childhood, early adulthood, and pregnancy. Improving the access to and promoting the use of reproductive and contraceptive services will help reduce the prevalence of this complication. [References: 108]
Shoulder dystocia: risk identification. [Review] [64 refs]

Obstetrical brachial palsy: pathogenesis, risk factors, and prevention. [Review] [28 refs]

Emergencies in operative obstetrics. [Review] [24 refs]
Abstract
Among all the emergency situations which may arise across the field of obstetrics and gynaecology, there are a small number which call for urgent practical steps to be taken in order to safeguard the life of the mother or the baby or both. The three such complications dealt with in this chapter consist of one prior to delivery—prolapse of the umbilical cord; one during delivery—shoulder dystocia; one following delivery—acute inversion of the uterus. All of the above require prompt action by well-trained staff and may involve the active and efficient co-operation of a range of different health care professionals. It is critically important that staff are fully aware of the procedures to be followed and the chain of command which will ensure that they are followed as efficiently and successfully as possible.

References: 24

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Title
Estimating fetal weight in the management of macrosomia. [Review] [137 refs]

Source

Abstract
The purpose of this review is to examine the evidence that, including estimates of fetal macrosomia in patient care, will decrease adverse perinatal outcomes. A literature search for the years 1980 to 1999 was used. Shoulder dystocia and brachial plexus injuries occur more often in macroscopic than in non-macroscopic neonates. However, 26 to 58 percent of shoulder dystocias and 24 to 44 percent of brachial plexus injuries occur to babies weighing less than 4000 gm. Persistence of impairment is extremely rare. Neither historical nor clinical factors have strong positive predictive values for macrosomia. From 15 to 81 percent of the babies predicted to be macroscopic are confirmed by birth weight. Of babies determined to be macroscopic at birth, only 50 to 100 percent were successfully predicted. Shoulder dystocia and brachial plexus injuries are unpredictable events. Available evidence suggests that planned interventions based on estimates of fetal weight do not reduce the incidence of shoulder dystocia and do not decrease adverse outcomes attributable to fetal macrosomia. [References: 137]

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Dodds SD. Wolfe SW.
Perinatal brachial plexus palsy (PBPP) has been traditionally classified into three types: upper plexus palsy (Erb's) affecting the C5, C6, and +/- C7 nerve roots, lower plexus palsy (Klumpke's) affecting the C8 and T1 nerve roots, and total plexus palsy. Although most cases will resolve spontaneously, the natural history of the remaining cases is influenced by contractures of uninvolved muscle groups and subluxation or dislocation of the shoulder and elbow. Microsurgical nerve repair has demonstrated to provide improved outcomes compared to conservative treatment, while advancements in secondary reconstruction have offered significant improvements in the performance of activities of daily living for older children with unresolved plexus palsy. [References: 50]