Please find below the results of your literature search request.

If you would like the full text of any of the abstracts included, or would like a further search completed on this topic, please let us know.

We’d appreciate feedback on your satisfaction with this literature search. Please visit http://www.hello.nhs.uk/literature_search_feedback.asp and complete the form.

Thank you

**Literature search results**

<table>
<thead>
<tr>
<th>Search completed for:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Search request date:</td>
<td>20/7/2010</td>
</tr>
<tr>
<td>Search completion date:</td>
<td>23/7/2010</td>
</tr>
<tr>
<td>Search completed by:</td>
<td>Richard Bridgen</td>
</tr>
</tbody>
</table>

**Search details**

Bicornuate uterus with twin pregnancy

**Resources searched**

NHS Evidence; National Library for Health; TRIP Database; Cochrane Library; MEDLINE; EMBASE; Google Scholar

**Database search terms**

"bicornuate uterus"; “uterus bicornis”; uterus; bicorns; bicornuate; bicorn*; “twin pregnancy”; PREGNANCY, MULTIPLE; exp TWINS; twin*; pregnan*

**Google search string**

("bicornuate uterus" OR "uterus bicornis") ("twin pregnancy" OR twins) 1985..2010

**Summary**

There is some research on bicornuate uterus and twin pregnancy and I have included relevant studies below. Due to the general nature of your search request, I am not able to summarise the research further.

**Guidelines**

None found.

**Evidence-based reviews**

None found.

**Published research**

1. Case report of a maternal urinary bladder asymmetry in a twin gravid bicornuate uterus.
2. [Twin gestation in a single horn of a bicornuate uterus]. [Danish]
   
   Gemelligraviditet i et horn af bicorn uterus.

   Author(s): Maagaard M, Langhoff-Roos J
   Citation: Ugeskrift for Laeger, March 2009, vol./is. 171/11(907), 0041-5782;1603-6824
   (2009 Mar 9)
   Publication Date: March 2009

   Abstract: Bicornuate uterus is associated with early foetal loss and extremely preterm delivery. A patient with dichorionic twins in a single horn of a bicornuate uterus was admitted in week 24 + 6 with preterm labour. Long-term treatment with a combination of tocolytics, atosiban and diclofenac inhibited labour until week 26 + 3 where both babies were born. Both babies are still alive. Longterm tocolytic treatment may be successful in specific cases, but there is no evidence for a general use of long-term tocolysis in preterm labour.

   Source: MEDLINE


   Author(s): Arora M, Gupta N, Neelam, Jindal S
   Citation: Archives of Gynecology & Obstetrics, August 2007, vol./is. 276/2(193-5), 0932-0067;0932-0067 (2007 Aug)
   Publication Date: August 2007

   Abstract: INTRODUCTION: Abnormal fusion of the mullerian ducts or failure of absorption of the septum causes varying degrees of congenital uterine malformation. Twin gestation in a case of bicornuate uterus is extremely rare. We are reporting this case because of its extremely rare presentation, where twins have managed to reach term after spontaneous conception. CASE REPORT: A 28-year-old second gravida, para one was initially diagnosed to have diamniotic dichorionic twins on ultrasound. At term, she was referred to us with severe preeclamptic toxaemia. On examination, she was found to have a bicornuate uterus with one fetus in each horn. Both siblings were successfully delivered by caesarean section. So far, only one similar case has been reported following in vitro fertilisation. CONCLUSION: Although poor reproductive performance has been documented in previous reports of bicornuate uterus with twin gestation, our patient managed to reach term with delivery of healthy siblings by caesarean section.

   Source: MEDLINE

Full Text:
Available in fulltext at EBSCO Host

4. Bicorn-biamniotic twin pregnancy in bicornuate uterus with each twin in a different uterine cavity

   Author(s): Tarjuelo Amor A., Kazlauskas S.G., Herrero Gomiz S., De La Fuente Valero J., Zapardiel Gutierrez I.
   Citation: Acta Ginecologica, 2007, vol./is. 64/4(121-124), 0001-5776 (2007)
   Publication Date: 2007

   Abstract: Congenital uterine anomalies are more frequent nowadays than was thought in the past, although their prevalence is still unknown. Their stimation varies according to the population studied, although it is estimated around 4%. These differences are due to the
inaccuracy of the diagnostic methods used, the lack of a standardised classification system and the fact that many of these malformations are asymptomatic and remain undiagnosed. These malformations in the genital tract can cause multiple problems, from infertility and recurrent miscarriages to preterm births or foetal malpositions, which in turn increase perinatal morbidity and mortality.

Source: EMBASE

5. Mifepristone-induced abortion in one horn and a growing fetus in another horn in a patient with a twin pregnancy in a bicornuate uterus.

Author(s): Chao A, Chao AS, Wang ST, Wang TH

Citation: Fertility & Sterility, December 2006, vol./is. 86/6(1764.e3-5), 0015-0282;1556-5653 (2006 Dec)

Publication Date: December 2006

Abstract: OBJECTIVE: To report a case of mifepristone-induced abortion in only one horn but a growing fetus in another horn for a twin pregnancy in a bicornuate uterus. DESIGN: Case report. SETTING: Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital, Taiwan. PATIENT(S): A 31-year-old woman who conceived spontaneously presented with 37 days’ gestation. INTERVENTION(S): Mifepristone 600 mg orally followed by misoprostol 400 mug orally 2 days later. MAIN OUTCOME MEASURE(S): Termination of pregnancy. RESULT(S): Induced abortion in only one horn but a growing fetus in another horn for a twin pregnancy in the bicornuate uterus detected by ultrasound. Surgical abortion with vacuum curettage was performed, and menstruation resumed 1 month later. CONCLUSION(S): As medical abortion with mifepristone and misoprostol becomes more prevalent, more studies are necessary to establish the dosage and regimens for multiple pregnancies associated with uterine anomalies.

Source: MEDLINE

6. Twin gestation induced by clomiphene citrate and bromocriptine in both horns of a bicornuate uterus.

Author(s): Suh CS, Jee BC, Ku SY, Kim SH, Choi YM, Kim JG, Moon SY

Citation: Fertility & Sterility, September 2005, vol./is. 84/3(756), 0015-0282;1556-5653 (2005 Sep)

Publication Date: September 2005

Abstract: OBJECTIVE: To describe a case of twin gestation that occurred in both horns of a bicornuate uterus after the administration of clomiphene citrate and bromocriptine. DESIGN: Case report. SETTING: Department of Obstetrics and Gynecology, Seoul National University Bundang Hospital, Korea. PATIENT(S): A 34-year-old woman presented with secondary infertility and hyperprolactinemia. INTERVENTION(S): Bromocriptine, 2.5 mg/day, was administered immediately, and clomiphene citrate, 150 mg/day, was started from menstruation day 5 for 5 days. MAIN OUTCOME MEASURE(S): The establishment of pregnancy and obstetric outcome. RESULT(S): A nonidentical twin pregnancy occurred but ended in preterm delivery at 24 weeks. One baby has survived for over 3 months. CONCLUSION(S): Twin gestation can occur in both horns of a bicornuate uterus after clomiphene citrate administration.

Source: MEDLINE

7. Twin gestation induced by clomiphene citrate and bromocriptine in both horns of a bicornuate uterus


Citation: Fertility and Sterility, September 2005, vol./is. 84/3(756.e9-756.e10), 0015-0282 (Sep 2005)

Publication Date: September 2005

Abstract: Objective: To describe a case of twin gestation that occurred in both horns of a bicornuate uterus after the administration of clomiphene citrate and bromocriptine. Design: Case report. Setting: Department of Obstetrics and Gynecology, Seoul National University
Bundang Hospital, Korea. Patient(s): A 34-year-old woman presented with secondary infertility and hyperprolactinemia. Intervention(s): Bromocriptine, 2.5 mg/day, was administered immediately, and clomiphene citrate, 150 mg/day, was started from menstruation day 5 for 5 days. Main Outcome Measure(s): The establishment of pregnancy and obstetric outcome. Result(s): A nonidentical twin pregnancy occurred but ended in preterm delivery at 24 weeks. One baby has survived for over 3 months. Conclusion(s): Twin gestation can occur in both horns of a bicornuate uterus after clomiphene citrate administration. copyright2005 by American Society for Reproductive Medicine.

Source: EMBASE

8. Twin pregnancy in the horns of a bicornuate uterus after in vitro fertilization and split embryo transfer: a case report.

Author(s): Aruh I, Aslan D, Karamaaslan F, Pinar T, Keles R, Demir N

Citation: Journal of Reproductive Medicine, March 2005, vol./is. 50/3(213-5), 0024-7758;0024-7758 (2005 Mar)

Publication Date: March 2005

Abstract: BACKGROUND: Twin pregnancies located in the separate horns of a bicornuate uterus following in vitro fertilization and embryo transfer have been rarely reported. CASE: A 32-year-old woman presented with primary infertility and was diagnosed as having a bicornuate uterus. Because of severe male factor infertility, in vitro fertilization and embryo transfer were recommended. Embryo transfer resulted in a twin pregnancy with a fetus in each horn. CONCLUSION: Embryo transfer into separate uterine cavities resulted in a twin pregnancy, with a fetus in each horn, and term delivery. Split embryo transfer into each uterine cavity of an uncorrected bicornuate uterus is a feasible treatment option in selected patients, provided that the couple is counseled about the risks involved.

Source: MEDLINE

9. Value of routine transvaginal ultrasound scan in women requesting early termination of pregnancy

Author(s): Sinha P., Pradhan A., Chowdhury V.

Citation: Journal of Obstetrics and Gynaecology, June 2004, vol./is. 24/4(426-428), 0144-3615 (Jun 2004)

Publication Date: June 2004

Abstract: This was a retrospective study of 140 women attending a termination clinic from 1 April 2002 to 31 March 2003. All women had a transvaginal ultrasound scan. Of 140 women, 56 women benefited from the scan; 26.7% had non-viable pregnancy, 35.71% did not remember their LMP, 12.5% had discrepancy between the scan and LMP. Incidental findings were noted in 24.6% of which two had a twin gestation, nine had ovarian cysts, one had an ectopic pregnancy, one had a hydatidiform mole, one conceived with an IUCD and one had a bicornuate uterus with pregnancy in one horn. Two of the nine women with ovarian cysts needed a laparotomy. This study concludes that routine transvaginal scan (TVS) scan is an essential investigation for proper assessment of all women requesting termination of pregnancy. TVS is a safe and effective procedure which provides useful information regarding gestational age, viability of pregnancy and uncertain dates. In cases of the ectopic pregnancy and the hydatidiform mole transvaginal ultrasound helped us in appropriate management from the outset and minimised complications.

Source: EMBASE

Full Text:
Available in fulltext at EBSCO Host

10. Superfetation in uterus pseudo didelphys: an unreported event.

Author(s): Singhal SR, Agarwal U, Sharma D, Sen J

Citation: Archives of Gynecology & Obstetrics, August 2003, vol./is. 268/3(243-4), 0932-0067;0932-0067 (2003 Aug)
Abstract: A 20-year-old primigravida initially diagnosed at 28 weeks to have superfetation in a case of a bicornuate uterus was subsequently found to have uterus pseudo didelphys during a cesarean section at 35 weeks. This type of uterine anomaly with twin gestation has been previously reported in five case reports, but superfetation with such mullerian abnormality has not been previously described.

Source: MEDLINE

Full Text:
Available in fulltext at EBSCO Host

11. Twin gestation in one horn of a bicornuate uterus

Author(s): Narlawar R.S., Chavhan G.B., Bhatgadde V.L., Shah J.R.

Citation: Journal of Clinical Ultrasound, March 2003, vol./is. 31/3(167-169), 0091-2751 (Mar 2003)

Abstract: We report a rare case of twin pregnancy in the same horn of a bicornuate uterus. This patient's uterine malformation was detected for the first time when she experienced abdominal pain at 6 weeks of amenorrhea. Transabdominal and transvaginal sonographic examinations were performed. Both embryos showed cardiac motion on transvaginal sonography. The patient was re-examined monthly. Her pregnancy ended in spontaneous abortion at 22 weeks. Two live male fetuses were delivered, but they both died immediately after their birth. Sonography, particularly transvaginal sonography, is valuable for early detection of uterine abnormalities that may affect the outcome of pregnancy. Copyright 2003 Wiley Periodicals, Inc.

Source: EMBASE

Full Text:
Available in print at Pilgrim Hospital Staff Library

12. Reproductive outcome of 32 patients with primary or secondary infertility and uterine pathology

Author(s): Malik E., Berg C., Sterzik K., Stoz F., Rossmanith W.G.

Citation: Archives of Gynecology and Obstetrics, 2000, vol./is. 264/1(24-26), 0932-0067 (2000)

Publication Date: 2000

Abstract: We did a retrospective study on 102 patients who had a laparoscopy and a hysteroscopy during investigations for primary or secondary infertility. 32 of the 102 patients had uterine pathology. Seven of them had septate uteri, eight had uterine synechiae, another six had uterine fibroids, four had a bicornuated uterus, while the remaining had either a combination of all or other uterine anomalies. After surgical treatment of these conditions ten women conceived and five pregnancies including one twin pregnancy resulted in term deliveries.

Source: EMBASE

Full Text:
Available in fulltext at EBSCO Host


Author(s): Kuczynski AW, Szczesniak W, Szczygielski A

Citation: Acta Geneticae Medicae et Gemellologiae, 1998, vol./is. 47/3-4(201-4), 0001-5660;0001-5660 (1998)

Publication Date: 1998
Abstract: We described a case of pregnancy, delivery and peurperium of 28 years old multipara with twins pregnancy in bicornuate, unicollis uterus. Each fetus was placed in separate horn of uterus. Biological mature pregnancy was delivered by cesarean section. During the peurperium the involution disturbances of one of the uterus horns were observed. The case was discussed in context of other similar anomalies.

Source: MEDLINE

14. Epidemiological characteristics of gestation in women with uterus bicornis

Author(s): Martinez-Frias M.L., Bermejo E., Rodriguez-Pinilla E., Jimenez N., Suay M., Mujica I.

Citation: Progresos en Obstetricia y Ginecologia, 1998, vol./is. 41/9(505-509), 0304-5013 (1998)

Publication Date: 1998

Abstract: Background. Most studies of women with uterus bicornis have analyzed the fertility problems that women with this uterine malformation have, as well as the complications of pregnancy, such as spontaneous miscarriage, twin pregnancies, ectopic pregnancies, premature birth, non-cephalic presentation, etc. Methods: An analysis was made of data on the mothers of 26,945 children with malformations from the database of the Spanish Collaborative Study of Congenital Malformations (ECEMC). The characteristics of the pregnancies of mothers with uterus bicornis were compared with those of mothers with a normal uterus. Results: Our results showed that women with uterus bicornis had a higher proportion (statistically significant) of spontaneous miscarriages, premature birth, non-cephalic presentation, and cesarean delivery than women with a normal uterus. Conclusions: We conclude that pregnancies in women with uterus bicornis are high risk from the obstetric and pediatric points of view and should be treated as such during medical control.

Source: EMBASE

15. Twin gestation occupying separate horns of a bicornuate uterus after in-vitro fertilization and embryo transfer.

Author(s): Barmat LI, Damario MA, Kowalik A, Kligman I, Davis OK, Rosenwaks Z

Citation: Human Reproduction, October 1996, vol./is. 11/10(2316-8), 0268-1161;0268-1161 (1996 Oct)

Publication Date: October 1996

Abstract: The detection of congenital uterine anomalies has increased because of heightened physician awareness and improved diagnostic modalities. The occurrence of a twin pregnancy occupying separate horns of a bicornuate uterus has been reported only sporadically in the literature. This is the first reported case resulting after in-vitro fertilization and embryo transfer.

Source: MEDLINE

Full Text: Available in fulltext at Highwire Press

16. Simultaneous pregnancy in each cavity of the bicervical bicornuate uterus with double vagina

Author(s): Bongain A., Constantopoulos P., Castillon J.M., Ibghi W., Isnard V., Gillet J.Y.

Citation: Revue Francaise de Gynecologie et d'Obstetrique, 1994, vol./is. 89/1(32-35), 0035-290X (1994)

Publication Date: 1994

Abstract: A case of twin pregnancy in a bicervical uterus with double vagina is reported. The malformation was known before conception. Caeserean section was performed for premature rupture of the membranes at 34 weeks. This enabled the extraction of two low-birth-weight premature infants free of any particular pathology. The possibility of twin
pregnancy in a bicervical bicornuate uterus is 1/1,000,000 and implies the maturation of at least two oocytes. This is a high risk pregnancy. Spontaneous abortions, prematurity (40%), low-birth-weight (25%) are the most notable complications. Although the probability of dynamic dystocia is multiplied by 7, vaginal delivery is not excluded when the obstetric past history is satisfactory and the presentation of both twins cephalic. Caesarean involves hysterotomy of each horn and raises no special technical problems. Double delivery increases the risk of hemorrhage.

Source: EMBASE

17. [Simultaneous pregnancy in each cavity of a bicornuate bicervical uterus with a double vaginal. [French] Grossesse simultanee dans chaque cavite d'un uterus bicone bicervical avec vagin double.

Author(s): Bongain A, Constantopoulos P, Castillon JM, Ibghi W, Isnard V, Gillet JY

Citation: Revue Francaise de Gynecologie et d Obstetrique, January 1994, vol./is. 89/1(32-5), 0035-290X;0035-290X (1994 Jan)

Publication Date: January 1994

Abstract: A case of twin pregnancy in a bicervical uterus with double vagina is reported. The malformation was known before conception. Caesarean section was performed for premature rupture of the membranes at 34 weeks. This enabled the extraction of two low-birth-weight premature infants free of any particular pathology. The possibility of twin pregnancy in a bicervical bicornuate uterus is 1/1,000,000 and implies the maturation of at least two oocytes. This is a high risk pregnancy. Spontaneous abortions, prematurity (40%), low-birth-weight (25%) are the most notable complications. Although the probability of dynamic dystocia is multiplied by 7, vaginal delivery is not excluded when the obstetric past history is satisfactory and the presentation of both twins cephalic. Caesarean involves hysterotomy of each horn and raises no special technical problems. Double delivery increases the risk of hemorrhage.

Source: MEDLINE

18. Dicavitary uteri with twin gestation: a case following clomiphene citrate therapy and review of obstetric outcomes.

Author(s): Vandermolen DT, Layman LC, Devoe LD

Citation: American Journal of Perinatology, November 1993, vol./is. 10/6(444-7), 0735-1631;0735-1631 (1993 Nov)

Publication Date: November 1993

Abstract: We report the first case of dicavitary twin pregnancy, following clomiphene citrate therapy, in a patient with uterus bicornis bicornis and anovulation. A review of the literature is presented, and obstetric outcomes and management of these rare pregnancies are discussed.

Source: MEDLINE

19. Luteal insufficiency as the primary cause of habitual abortion--its successful treatment.

Author(s): Siklodi G

Citation: Acta Bio-Medica de l Ateneo Parmense, 1992, vol./is. 63/1-2(101-11), 0392-4203;0392-4203 (1992)

Publication Date: 1992

Abstract: In order to assess luteal insufficiency as a causative factor in habitual abortion, serial progesterone determinations were accomplished. Luteal insufficiency was proved on the basis of progesterone values by criteria elaborated by the author in 151 of 160 unselected patients with a history of 2-6 (mean 3.3) unsuccessful pregnancies. Normalization of luteal function before conception resulted in birth in case of 148 (92.5%) and first or second trimester abortion in case of 12 women (7.5%). 148 women with physiological luteal function delivered 205 newborns from 192 pregnancies (in 44 patients two, in 11 patients twin pregnancies and in one case a trigeminal pregnancy). Out of 12
twin pregnancies 10 terminated with mature, one with immature (complicated with uterus bicornis) births and one terminated with spontaneous abortion. One from the two trigeminal pregnancies resulted in immature birth and one in a spontaneous abortion in the second trimester. Fifteen pregnancies conceived in the group of 13 women with uterus bicornis or septus resulted in 13 mature and one premature births and the sole twin pregnancy case ended with immature birth. Based on the results achieved so far, the author regard the treatment of luteal insufficiency—beside the proving the aetiology—as the most successful therapy for habitual abortion.

Source: MEDLINE


Author(s): Celiloglu M, Issever D, Posaci C, Onvural A

Citation: Revue Francaise de Gynecologie et d'Obstetrique, October 1991, vol./is. 86/10(613-4), 0035-290X;0035-290X (1991 Oct)

Publication Date: October 1991

Abstract: A case of twin pregnancy in bicornuate uterus with a fetus in each horn is presented. During the second trimester, the rudimentary horn ruptured. This horn was extirpated and two non viable fetus were delivered by cesarean section. Later on, the patient had another pregnancy in the unicornuate uterus. She was delivered at 36th week of pregnancy by cesarean section. The baby was in good condition.

Source: MEDLINE

21. A twin pregnancy in a bicornuate uterus

Author(s): Celiloglu M., Issever D., Posaci C., Onvural A.

Citation: Revue Francaise de Gynecologie et d'Obstetrique, 1991, vol./is. 86/10(613-614), 0035-290X (1991)

Publication Date: 1991

Abstract: A case of twin pregnancy in bicornuate uterus with a fetus in each horn is presented. During the second trimester, the rudimentary horn ruptured. This horn was extirpated and two non viable fetus were delivered by cesarean section. Later on, the patient had another pregnancy in the unicornuate uterus. She was delivered at 36th week of pregnancy by cesarean section. The baby was in good condition.

Source: EMBASE

22. Twin gestation induced with hMG-hCG in a patient with a bicornuate uterus: report of a successful delivery.

Author(s): Tanaka T, Fujimoto S, Matsuzaki N, Sakuragi N, Ichinoe K

Citation: International Journal of Fertility, January 1988, vol./is. 33/1(33-5), 0020-725X;0020-725X (1988 Jan-Feb)

Publication Date: January 1988

Source: MEDLINE

Google Scholar

From the first 50 results…

Quadruplet pregnancy: Two sets of twins, each occupying a horn of a septate (complete) uterus.


... these numbers are probably higher in a case of twin gestations in each horn of a bicornuate uterus. ... twins each in separate horns of either a uterus bicornis bicollis or a uterus bicornis unicollis have ... 5– 7 There was 1 case in which a twin pregnancy was
Successful twin pregnancy in a unicorunate uterus with one fetus in the non-communicating rudimentary horn

S Nanda, K Dahiya, N Sharma, D Aggarwal, SR ... - Archives of gynecology ..., 2009 - Springer


Rudimentary horn pregnancy: first-trimester prerupture sonographic diagnosis and confirmation by magnetic resonance imaging

A Tsafir, N Rojansky, HY Sela ... - ... of Ultrasound in ..., 2005 - Am inst Ultrasound Med

... early sonographic diagnosis of RHP: (1) pseudopattern of an asymmetrical bicornuate uterus, (2) absent ... Rudimentary uterine horn pregnancy: a case report on surviving twins delivered eight ... 75:437–440,[Medline]; Gagnon AL, Galerneau F, Williams K. Twin pregnancy with one ...

Triplet heterotopic pregnancy with an intrauterine monochorionic diamniotic twin pregnancy and an interstitial pregnancy following in vitro fertilisation and transfer of ...

DS Nikolaou, S Lavery, R Bevan, R ... - ... of Obstetrics & ..., 2002 - informahealthcare.com

... Ten days later a transvaginal ultrasound confirmed an ongoing intrauterine twin pregnancy. ... pregnancy’ is a pregnancy that is implanted in the horn of a bicornuate uterus, or in a rudimentary horn or the lateral part ... This accounts for two-thirds of monozygotic twins (Neilson, 1995 ...}

A short review of twin pregnancy and how oxytocin receptor expression may differ in multiple pregnancy

P Turton, JP Neilson, S Quenby, T Burdyga, S ... - European Journal of ..., 2009 - Elsevier

... Successful term twin pregnancy, although uncommon, can also occur in the presence of uterine abnormalities such as bicornuate uterus [16 ... In a recent review Blickstein describes how the human uterus is relatively well able to cope with twins and how this differs in the case ...

A rare case of cervical twin ectopic pregnancy

CSM Saroja, M Galal, S Leeson - Journal of Obstetrics & ..., 2010 - informahealthcare.com

... The differential diagnosis was of cervical ectopic or bicornuate uterus both pregnancies in one horn. ... Pascual MA, Ruiz J, Tresserra F, et al. 2001. Cervical ectopic twin pregnancy: diagnosis and conservative treatment. Human Reproduction 16:584–586. ...