



West Middlesex University Hospital

McArdle's Disease and Pregnancy

Date of Search: 10/08/2016

Source searched: Medline, Embase, Google Scholar.

Search History:

1. Medline; exp GLYCOGEN STORAGE DISEASE TYPE V/; 578 results.
2. Medline; "Glycogen storage disease type V".ti,ab; 31 results.
3. Medline; "GSD-V".ti,ab; 9 results.
4. Medline; "McArdle disease".ti,ab; 208 results.
5. Medline; "myophosphorylase deficiency".ti,ab; 151 results.
6. Medline; 1 OR 2 OR 3 OR 4 OR 5; 663 results.
7. Medline; pregn*.ti,ab; 376181 results.
8. Medline; exp PREGNANCY/; 790627 results.
9. Medline; 7 OR 8; 862733 results.
10. Medline; 6 AND 9; 9 results.
11. Medline; exp PREGNANCY COMPLICATIONS/; 375293 results.
12. Medline; "labor obstetric".af; 27798 results.
13. Medline; (labour OR labor).ti,ab; 80405 results.
14. Medline; 11 OR 12 OR 13; 441453 results.
15. Medline; 6 AND 14; 4 results.
16. EMBASE; "Glycogen storage disease type V".ti,ab; 38 results.
17. EMBASE; "GSD-V".ti,ab; 10 results.
18. EMBASE; "McArdle disease".ti,ab; 247 results.
19. EMBASE; "myophosphorylase deficiency".ti,ab; 149 results.
20. EMBASE; exp GLYCOGEN STORAGE DISEASE TYPE 5/; 863 results.
21. EMBASE; 16 OR 17 OR 18 OR 19 OR 20; 907 results.
22. EMBASE; pregn*.ti,ab; 507228 results.
23. EMBASE; exp PREGNANCY/; 624507 results.
24. EMBASE; 22 OR 23; 800485 results.
25. EMBASE; 21 AND 24; 10 results.
26. EMBASE; exp PREGNANCY COMPLICATION/; 116600 results.
27. EMBASE; 21 AND 26; 1 results.
28. EMBASE; exp LABOR/ OR exp LABOR COMPLICATION/; 182740 results.
29. EMBASE; 21 AND 28; 3 results.
30. EMBASE; exp PRENATAL CARE/; 120154 results.
31. EMBASE; 21 AND 30; 7 results.
32. EMBASE; exp OBSTETRIC PATIENT/; 1103 results.
33. EMBASE; 21 AND 32; 0 results.
34. Medline; obstetric*.ti,ab; 81425 results.
35. Medline; 6 AND 34; 0 results.

36. Medline; exp PRENATAL CARE/; 22165 results.
37. Medline; 6 AND 36; 0 results.
38. Medline; exp DELIVERY, OBSTETRIC/; 68097 results.
39. Medline; 6 AND 38; 4 results.

Title: Acute compartment syndrome: clinical course and laboratory findings in pregnant patients with McArdle's disease.

Citation: Pain medicine (Malden, Mass.), Mar 2014, vol. 15, no. 3, p. 481-482, 1526-4637 (March 2014)

Author(s): Findlay, Shannon, Liu, Dawei, Rijhsinghani, Asha

Source: Medline

Full Text:

Available from *Oxford University Press* in [Pain Medicine](#); Note: ; Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Title: Myophosphorylase deficiency (McArdle disease) in a patient with normal pregnancy and normal pregnancy outcome.

Citation: Obstetric Medicine. 2011 Sep; vol. 4 no.3 pp.120-121

Author(s): Giles W, Maher C.

Abstract: McArdle disease is a rare, mostly autosomal recessive disorder of deficient myophosphorylation of glycogen in skeletal muscles. Recent knowledge regarding this condition means that women of childbearing age with McArdle disease can expect to labour normally without ill effect. We report a case of a 30-year-old woman in her first pregnancy who had an episode of exercise-induced myoglobinuria with a significant rise in serum creatine kinase (CK) levels in early pregnancy who then laboured normally but did require a caesarean section for a malposition of the fetal head.

Title: McArdle disease: A clinical review

Citation: Journal of Neurology, Neurosurgery and Psychiatry, November 2010, vol./is. 81/11(1182-1188), 0022-3050;1468-330X (November 2010)

Author(s): Quinlivan R., Buckley J., James M., Twist A., Ball S., Duno M., Vissing J., Bruno C., Cassandrini D., Roberts M., Winer J., Rose M., Sewry C.

Language: English

Abstract: Methods: The clinical phenotype of 45 genetically confirmed McArdle patients is described. Results: In the majority of patients (84%), the onset of symptoms was from early childhood but diagnosis was frequently delayed until after 30 years of age. Not all patients could recognise a second wind although it was always seen with exercise assessment. A history of myoglobinuria was not universal and episodes of acute renal failure had occurred in a minority (11%). The condition does not appear to adversely affect pregnancy and childbirth. Clinical examination was normal in most patients, muscle hypertrophy was present in 24% and mild muscle wasting and weakness were seen only in patients over 40 years of age and was limited to shoulder girdle and axial muscles. The serum creatine kinase was elevated in all but one pregnant patient. Screening for the mutations pArg50X (R50X) and pGly205Ser (G205S) showed at least one mutated allele in 96% of Caucasian British patients, with an allele frequency of 77% for pArg50X in this population. A 12 min walking test to evaluate patients is described. Conclusion: The results demonstrated a wide spectrum of severity with the range of distance walked (195-1980 m); the mean distance walked was 512 m, suggesting significant functional impairment in most patients.

Publication Type: Journal: Review

Source: EMBASE

Full Text:

Available from *Highwire Press* in [Journal of neurology, neurosurgery, and psychiatry](#)

Available from *ProQuest* in [Journal of Neurology, Neurosurgery and Psychiatry](#)

Title: Pregnancy control and management of labor in McArdle's disease [Spanish] Control del embarazo y manejo intraparto en la enfermedad de McArdle

Citation: *Progresos en Obstetricia y Ginecologia*, May 2008, vol./is. 51/5(307-310), 0304-5013;1578-1453 (01 May 2008)

Author(s): Canedo Carballeira E.M., Vila E.F., Martinez M.J.C., Lopez A.D.L.I.

Language: Spanish

Abstract: We describe the pregnancy course and labor in a woman with myophosphorylase deficiency (McArdle's disease or glycogen storage disease type V). McArdle's disease is an uncommon hereditary disorder characterized by symptoms of muscular fatigue and pain, as well as by muscle cramps during heavy and continuous exercise. We feared that the increase in muscular effort during labor might complicate delivery, necessitating cesarean section.

Publication Type: Journal: Article

Source: EMBASE

Title: [Anesthesia for cesarean section in a patient with McArdle disease and hereditary dilated cardiomyopathy].

Citation: Annales franc,aises d'anesthe`sie et de re`animation, Jun 2002, vol. 21, no. 6, p. 517-520, 0750-7658 (June 2002)

Author(s): Lepoivre, T, Legendre, E, Pinaud, M

Abstract: A caesarean section was indicated in a 29-year-old parturient affected by a muscular deficit in myophosphorylase responsible for a type V glycogen storage disease (McArdle disease). This metabolic myopathy had been diagnosed two years previously, whereas the patient already suffered from a hereditary form of dilated cardiomyopathy. The muscular disease was invalidating on the functional level with exercise intolerance. The cardiopathy was little symptomatic but the dysfunction of the left ventricle worsened during the pregnancy with an ejection fraction calculated to 43%. In this case, we report the realization of a general anaesthesia in a patient who had epidural anaesthesia for a previous caesarean section.

Source: Medline

Title: Successful pregnancy in a patient with type III glycogen storage disease managed with cornstarch supplements

Citation: British Journal of Obstetrics and Gynaecology, 1998, vol./is. 105/6(677-680), 0306-5456 (1998)

Author(s): Mendoza A., Fisher N.C., Duckett J., McKiernan J., Preece M.A., Green A., McKiernan P.J., Constantine G., Elias E.

Language: English

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *British Journal of Obstetrics and Gynaecology* in [Patricia Bowen Library and Knowledge Service West Middlesex university Hospital](#)

Title: McArdle's disease and caesarean section

Citation: Anaesthesia, February 1988, vol./is. 43/2(161-162), 0003-2409 (Feb 1988)

Author(s): Samuels T.A., Coleman P.

Language: English

Publication Type: Journal: Letter

Source: EMBASE

Title: McArdle's disease. Problems of anaesthetic management for Caesarean section.

Citation: Anaesthesia, Aug 1984, vol. 39, no. 8, p. 784-787, 0003-2409 (August 1984)

Author(s): Coleman, P

Abstract: A case is presented of the anaesthetic management of a patient with McArdle's disease who required Caesarean section. The pathology of the condition is considered together with the clinical features and treatment. The problems of anaesthesia in patients with this inherited disease are discussed with particular reference to the use of muscle relaxant drugs.

Source: Medline

Title: Normal pregnancy and successful delivery in myophosphorylase deficiency (McArdle's disease).

Citation: Journal of neurology, neurosurgery, and psychiatry, Apr 1973, vol. 36, no. 2, p. 225-227, 0022-3050 (April 1973)

Author(s): Cochrane, P, Alderman, B

Abstract: The progress in pregnancy of a female with myophosphorylase deficiency (McArdle's disease) is described. In spite of the increased muscular effort expended, both pregnancy and labour were normal and the muscle symptoms unchanged, suggesting that compensatory mechanisms might have operated. These possible mechanisms are discussed. Women suffering from the myopathy need not expect any deterioration during pregnancy.

Source: Medline

Full Text:

Available from *National Library of Medicine* in [Journal of Neurology, Neurosurgery, and Psychiatry](#)

Available from *Highwire Press* in [Journal of Neurology, Neurosurgery and Psychiatry](#)

Available from *Highwire Press* in [Journal of neurology, neurosurgery, and psychiatry](#)

Available from *ProQuest* in [Journal of Neurology, Neurosurgery and Psychiatry](#)

Available from *National Library of Medicine* in [Journal of Neurology, Neurosurgery, and Psychiatry](#)

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