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Date: 2 February 2018
Sources: Medline, Embase.

Spontaneous Resolution of Chiari Malformation with Syringomyelia

See full search strategy

1. Spontaneous resolution of Chiari I malformation and associated syringomyelia following parturition.

Author(s): Muthukumar, Natarajan; Christopher, John

Source: Acta neurochirurgica; May 2013; vol. 155 (no. 5); p. 817-818

Publication Date: May 2013

Publication Type(s): Letter Case Reports

PubMedID: 23355063

Available at Acta neurochirurgica - from SpringerLink

Available at Acta neurochirurgica - from ProQuest (Hospital Premium Collection) - NHS Version

Database: Medline

2. Spontaneous resolution of syringomyelia in Chiari I malformation: A review of literature.

Author(s): Jain, Pradeep Kumar; Sreeharsha, S V; Dugani, Suresh

Source: Neurology India; 2017; vol. 65 (no. 5); p. 1187-1189

Publication Date: 2017

Publication Type(s): Letter

PubMedID: 28879935

Available at Neurology India - from ProQuest (Hospital Premium Collection) - NHS Version

Available at Neurology India - from Free Medical Journals . com

Database: Medline

3. Spontaneous resolution of Chiari malformation and associated syringomyelia.

Author(s): Mazumder, Arun K; Das, Sayan; Krishnan, Prasad

Source: Neurology India; 2016; vol. 64 (no. 6); p. 1335-1336

Publication Date: 2016

Publication Type(s): Letter

PubMedID: 27841218

Available at Neurology India - from ProQuest (Hospital Premium Collection) - NHS Version

Available at Neurology India - from Free Medical Journals . com

Available at Neurology India - from neurologyindia.com

Database: Medline

4. Spontaneous Improvement of Chiari I Malformation and Syringomyelia in a Patient With Cystic Fibrosis: Case Report.

Author(s): Khanna, Arjun R; Coumans, Jean-Valery

Source: Neurosurgery; Feb 2016; vol. 78 (no. 2); p. E305

Publication Date: Feb 2016

Publication Type(s): Case Reports Journal Article

PubMedID: 26308731

Available at Neurosurgery - from Ovid (Journals @ Ovid)

Available at Neurosurgery - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:BACKGROUND AND IMPORTANCESyringomyelia is highly associated with Chiari I malformation, but the pathophysiologic mechanism of syrinx formation and its relation to downward cerebellar tonsillar displacement remains elusive. Cough, Valsalva maneuver, and other physiological strains transiently exacerbate the clinical symptoms of these conditions, exert profound effects on the flow dynamics across the craniospinal junction, and are thought to play an important role in the pathogenesis of syringomyelia.CLINICAL PRESENTATIONWe report the case of a patient with cystic fibrosis who presented during an exacerbation of bronchiectasis and was found to have a Chiari I malformation with associated syringomyelia. Eight months later, when the patient had returned to baseline pulmonary status, repeat imaging showed interval improvement in both the size of the syrinx and descent of cerebellar tonsils.CONCLUSIONThis rare case of spontaneous improvement of syringomyelia and Chiari I malformation attributable to relief from chronic cough offers interesting insight into the mechanism of these disorders.ABBREVIATIONSFEV1, forced expiratory volume in 1 secondFVC, forced vital capacity.

Database: Medline

5. Spontaneous regression of syringomyelia in a young patient with chiari type I malformation

Author(s): Tortora F.; Cirillo M.; Pepe D.; Cirillo S.; Napoli M.; Briganti F.; Caranci F.

Source: Neuroradiology Journal; Oct 2012; vol. 25 (no. 5); p. 593-597

Publication Date: Oct 2012

Publication Type(s): Article

Abstract: Syringomyelia is a disorder in which a cyst or cavity forms within the spinal cord. This cyst, called syrinx, can expand and elongate over time, destroying the spinal cord. We describe the case of a young patient with partial spontaneous regression of syringomyelia in Chiari I malformation, confirmed by magnetic resonance imaging three years after the diagnosis. During this period the patient did not experience any clinical symptoms. Although described in literature, spontaneous regression is an unusual event and very few cases have been reported. This case report supports the belief that conservative management together with both clinical and imaging periodic controls should be preferred in stable mild-symptomatic patients.

Database: EMBASE

6. Management of syringomyelia in pregnancy-a case presentation

Author(s): Hassaballa M.M.; Vaughan H.; Akhtar S.; Tahir A.

Source: International Journal of Gynecology and Obstetrics; Oct 2012; vol. 119

Publication Date: Oct 2012

Publication Type(s): Conference Abstract

Abstract: Objectives: To explore the management of Syringomyelia in pregnancy and to identify pitfalls in treating the disorder. Materials: 28 years old A&E nurse who developed persistent headache and neck pain with signs and symptoms of limbs paraethesia and weakness. An MRI confirmed the diagnosis of Syringomyelia in 2008 as cyst was found impinging on the CSF. She was managed conservatively. The patient declined surgical interventions in view of spontaneous resolution of the cyst with a subsequent improvement of all the ailments. She fell pregnant in 2011 and was managed jointly with no signs of the disease flaring up and went on to have a normal delivery, without any relevant complications. Methods: The patient case notes and literature search were adopted to reveal that one third of patients with Syringomyelia the clinical course of the disease is static, however in the other two thirds a deterioration is likely to lead to neurological deficits. Results: Syringomyelia is a rare neurological condition which is characterised by the formation of a cyst (syrinx) within the spinal cord. It occurs in 8.4 per 100,000 individuals and affects both men and women equally. The symptoms begin between ages 25-40 years. There is a strong association and probably a causal relationship between traumatic birth and communicating type of Syringomyelia. The aetiology and pathophysiology of the disease remain controversial. It is the expansion of the cyst into the spinal cord that leads to symptoms like headache, weakness and stiffness in the back, shoulders, arms and legs. Conclusions: There is no significant effect of Syringomyelia on the progress of pregnancy, despite an anecdotal association with IUGR described in literature. The antenatal follow up must be in multidisciplinary manner involving Obstetrician but also neurosurgeons. It is vital to prevent any rise in CSF pressure in the intrapartum period. During epidural anaesthesia, although cerebrospinal pressure is maintained there is a risk of dural puncture and the potential onset of symptoms afterwards, thus spinal anaesthesia is best avoided. In patients with Syringomelia requiring caesarean section for Obstetrics reason, Suxamethonium should be avoided if General anaesthesia is contemplated, as there is a risk of hyperkalaemia in patients with neurological disorders. The neonatal outcome is usually excellent.

Database: EMBASE

7. Spontaneous resolution of syrinx: Report of two cases in adults with Chiari malformation

Author(s): Vaquero J.; Ferreira E.; Parajon A.

Source: Neurological Sciences; Apr 2012; vol. 33 (no. 2); p. 339-341

Publication Date: Apr 2012

Publication Type(s): Article

PubMedID: 21710125

Available at Neurological Sciences - from SpringerLink

Available at Neurological Sciences - from ProQuest (Hospital Premium Collection) - NHS Version

Abstract: Idiopathic syringomyelia is a disease with variable clinical course. We report here two cases of spontaneous resolution of cervical syrinx in adults previously diagnosed of Chiari-syringomyelia complex. They are added to the nine cases previously reported, and documented the need for careful surgical indication in this disease based on the radiological images of spinal cord cavitation.

Database: EMBASE

8. Spontaneous resolution of syringomyelia in an adult patient with tight cisterna magna

Author(s): Perrini P.

Source: Neurological Sciences; Mar 2012; vol. 33 (no. 6); p. 1463-1467

Publication Date: Mar 2012

Publication Type(s): Article

PubMedID: 22258363

Available at Neurological Sciences - from SpringerLink

Available at Neurological Sciences - from ProQuest (Hospital Premium Collection) - NHS Version

Abstract: Spontaneous resolution of syringomyelia in adult patients with Chiari malformation is exceptionally rare, with only 10 cases having been reported. A 21-year-old man working as a carpenter presented with a 1-year history of paresthesias in his right arm. A magnetic resonance imaging scan disclosed a cervicothoracic syrinx associated with tight tonsillar impaction of the cisterna magna without herniation. The patient left the carpentry job and underwent close monitoring with serial clinical and neuroradiological controls. The patient's symptoms gradually disappeared and magnetic resonance imaging studies revealed progressive shrinkage of the syrinx despite persistence of crowding of posterior fossa structures at the level of the foramen magnum. This case suggests that spontaneous resolution of syringomyelia can occasionally be triggered by the cessation of daily physical strain in patients with tight cisterna magna. Health care professionals should be aware that strenuous physical activities could affect the natural history of syringomyelia.

Database: EMBASE

9. Natural history of Chiari malformation Type I following decision for conservative treatment.

Author(s): Strahle, Jennifer; Muraszko, Karin M; Kapurch, Joseph; Bapuraj, J Rajiv; Garton, Hugh J L; Maher, Cormac O

Source: Journal of neurosurgery. Pediatrics; Aug 2011; vol. 8 (no. 2); p. 214-221

Publication Date: Aug 2011

Publication Type(s): Journal Article

PubMedID: 21806365

Abstract:OBJECTThe natural history of the Chiari malformation Type I (CM-I) is incompletely understood. The authors report on the outcome of a large group of patients with CM-I that were initially selected for nonsurgical management.METHODSThe authors identified 147 patients in whom CM-I was diagnosed on MR imaging, who were not offered surgery at the time of diagnosis, and in whom at least 1 year of clinical and MR imaging follow-up was available after the initial CM-I diagnosis. These patients were included in an outcome analysis.RESULTSPatients were followed clinically and by MR imaging for a mean duration of 4.6 and 3.8 years, respectively. Of the 147 patients, 9 had new symptoms attributed to the CM-I during the follow-up interval. During this time, development of a spinal cord syrinx occurred in 8 patients; 5 of these patients had a prior diagnosis of a presyrinx state or a dilated central canal. Spontaneous resolution of a syrinx occurred in 3 patients. Multiple CSF flow studies were obtained in 74 patients. Of these patients, 23 had improvement in CSF flow, 39 had no change, and 12 showed worsening CSF flow at the foramen magnum. There was no significant change in the mean amount of cerebellar tonsillar herniation over the follow-up period. Fourteen patients underwent surgical treatment for CM-I. There were no differences in initial cerebellar tonsillar herniation or CSF flow at the foramen magnum in those who ultimately underwent surgery compared with those who did not.CONCLUSIONSIn patients with CM-Is that are selected for nonsurgical management, the natural history is usually benign, although spontaneous improvement and worsening are occasionally seen.

Database: Medline

10. Spontaneous syringomyelia resolution at an adult Chiari type 1 malformation

Author(s): Deniz F.E.; Oksuz E.

Source: Turkish neurosurgery; Jan 2009; vol. 19 (no. 1); p. 96-98

Publication Date: Jan 2009

Publication Type(s): Article

PubMedID: 19263363

Abstract: We present a 41-year-old man with Chiari type 1 malformation and cervical syringomyelia. Although the tonsillar herniation persisted, his syringomyelia was almost completely resolved during an eleven-year time period without surgery.

Database: EMBASE

11. Spontaneous regression of syringomyelia - review of the current aetiological theories and implications for surgery

Author(s): Sung W.-S.; Chen Y.-Y.; Dubey A.; Hunn A.

Source: Journal of Clinical Neuroscience; Oct 2008; vol. 15 (no. 10); p. 1185-1188

Publication Date: Oct 2008

Publication Type(s): Article

PubMedID: 18710806

Abstract:A number of hypotheses have been postulated to explain the development of syringomyelia associated with Chiari I malformation. However, the mechanism of syrinx development is still poorly understood. Furthermore, the outcomes of current surgical procedures have been variable. There is evidence that the syringomyelia can spontaneously resolve, and this may warrant a more conservative approach to monitor the progression of neurological deficits. In this paper, we present a patient with spontaneous regression of syringomyelia. The current aetiological theories are discussed.

Database: EMBASE

12. The natural history of the Chiari Type I anomaly.

Author(s): Novegno, Federica; Caldarelli, Massimo; Massa, Antonio; Chieffo, Daniela; Massimi, Luca; Pettorini, Benedetta; Tamburrini, Gianpiero; Di Rocco, Concezio

Source: Journal of neurosurgery. Pediatrics; Sep 2008; vol. 2 (no. 3); p. 179-187

Publication Date: Sep 2008

Publication Type(s): Case Reports Journal Article

PubMedID: 18759599

Abstract:OBJECTSince the advent of MR imaging, an increasing number of asymptomatic or oligosymptomatic patients have been diagnosed with Chiari malformation Type I (CM-I). The decision of whether or not to operate is more difficult in these patients than in those with clear symptoms because of the lack of information about the natural course of this disease.METHODSThe authors report on their experience in a series of 22 patients with CM-I who were evaluated at the authors' institution, and for whom a conservative approach to treatment was adopted. The patients ranged in age from 1 to 16 years (mean 6.3 years) at diagnosis. Neuroradiological and complete clinical examinations were performed in all patients 6 months after the first observation and every year thereafter. The follow-up period ranged from 3 to 19 years (mean 5.9 years).RESULTSChiari malformation Type I was incidentally detected on MR images in 11 of 22 patients. The remaining 11 patients had minimal clinical signs at presentation that were not regarded as necessitating immediate surgical treatment. Seventeen patients (77.3%) showed progressive improvement in their symptoms or remained asymptomatic at the last follow-up whereas 5 patients (22.7%) experienced worsening, which was mild in 2 cases and required surgical correction in the remaining 3 cases. On MR imaging a mild reduction in tonsillar herniation was appreciated in 4 patients (18.18%), with complete spontaneous resolution in 1 of these. In 16 patients, tonsillar herniation remained stable during follow-up.CONCLUSIONSThe authors' data confirm the common impression that in both asymptomatic and slightly symptomatic patients with CM-I, a conservative approach to treatment should be adopted with periodic clinical and radiological examinations.

Database: Medline

13. Regression of syringomyelia and tonsillar herniation after posterior fossa arachnoid cyst excision. Case report and literature review

Author(s): Martinez-Lage J.F.; Almagro M.J.; Ros De San Pedro J.; Ruiz-Espejo A.; Felipe-Murcia M.

Source: Neurocirugia; Jun 2007; vol. 18 (no. 3); p. 227-231

Publication Date: Jun 2007

Publication Type(s): Article

PubMedID: 17622461

Abstract: Background. Some reports have documented posterior fossa cysts resulting in syringomyelic obstruction of cerebrospinal fluid (CSF) flow caused by cyst displacement within the foramen magnum. Rarely the syringomyelia is caused by acquired Chiari malformation due-to a retrocerebellar arachnoid cyst. Objective. To report the case of a 38-year-old man with hydrocephalus and syringomyelia, who was found to have a Chiari malformation secondary to a posterior fossa arachnoid cyst. After endoscopic third ventriculostomy, the patient was submitted to foramen magnum decompression and arachnoid cyst removal that were followed by resolution of both the Chiari malformation and the syringomyelia. Discussion. In most published cases the syringomyelia has been attributed to obstruction of CSF flow at the foramen magnum by the arachnoid cyst itself. There is only one previous report of a posterior fossa arachnoid cyst producing tonsillar descent and syringomyelia. Conclusions. Posterior fossa arachnoid cysts can result in acquired Chiari malformation and syringomyelia. In our view, the management of these patients should be directed at decompressing the foramen magnum and include the removal of the walls of the coexistent arachnoid cyst as it seems to be the crucial factor that accounts for the development of the syringomyelia that these patients present.

Database: EMBASE

14. Spontaneous resolution of syringomyelia without Chiari malformation - Case report

Author(s): Ozisik P.A.; Hazer B.; Ziyal I.M.; Ozcan O.E.

Source: Neurologia Medico-Chirurgica; 2006; vol. 46 (no. 10); p. 512-517

Publication Date: 2006

Publication Type(s): Article

PubMedID: 17062993

Abstract:A 30-year-old woman presented with a cervical syrinx manifesting as hemihypesthesia. Neuroimaging found no evidence of Chiari malformation or tight cisterna magna. Serial magnetic resonance imaging studies over a 6-year period demonstrated spontaneous and complete resolution of the syrinx accompanied by an asymptomatic clinical course. The natural history of syringomyelia is highly unpredictable. The outcome of surgical treatment for patients with syringomyelia is not always satisfactory, so the indications for surgery are controversial. Spontaneous resolution of syringomyelia unrelated with foramen magnum lesion has various causes. Close follow up of the patient is necessary to monitor for recurrence.

Database: EMBASE

15. Spontaneous resolution of syringomyelia and Chiari malformation Type I in a patient with cerebrospinal fluid otorrhea. Case report

Author(s): Coppa N.D.; Kim H.J.; McGrail K.M.

Source: Journal of Neurosurgery; Nov 2006; vol. 105 (no. 5); p. 769-771

Publication Date: Nov 2006

Publication Type(s): Article

PubMedID: 17121142

Abstract: The spontaneous resolution of syringomyelia in the setting of a Chiari malformation Type I (CM-I) has been reported infrequently. Several theories about the pathogenesis and spontaneous resolution of syringomyelia associated with CM-I have been proposed. The authors present the case of a patient with spontaneous resolution of a CM-I and syringomyelia coinciding with the development of cerebrospinal fluid (CSF) otorrhea. Although cases of spontaneous resolution of syringomyelia have been reported, this is the first reported case of spontaneous resolution of syringomyelia and a CM-I associated with the simultaneous development of CSF otorrhea.

Database: EMBASE

16. Spontaneous resolution of isolated Chiari I malformation

Author(s): Jatavallabhula N.S.; Sgouros S.; Armstrong J.; Whitehouse W.

Source: Child's Nervous System; Feb 2006; vol. 22 (no. 2); p. 201-203

Publication Date: Feb 2006

Publication Type(s): Article

PubMedID: 16133272

Available at Child's Nervous System - from SpringerLink

Abstract: Introduction: Spontaneous resolution of Chiari I abnormality is very rare. In most patients, the radiological abnormality either stays unchanged with time or deriorates. Case report: We present a male patient who was diagnosed at the age of 18 months as having radiological evidence of Chiari I malformation without syringomyelia, which had resolved 5 years later on a subsequent MR scan. At the time of initial diagnosis, he had been experiencing recurrent jerking movements of his body and was a sufferer of chronic renal failure. Discussion: The symptoms were thought to be unrelated to the hindbrain hernia. Such spontaneous resolution of an isolated Chiari I malformation has only been described once more before, although resolution of hindbrain hernia associated with syringomyelia has been described before in several cases, albeit at single figures. The mechanism for such a natural evolution is not clear. Conclusion: This patient demonstrates that surgical treatment should not be considered hastily in patients with radiological evidence of Chiari I in the absence of convincing associated clinical symptoms. © Springer-Verlag 2005.

Database: EMBASE

17. Spontaneous regression of syringomyelia in Hajdu-Cheney syndrome with severe platybasia. Case report.

Author(s): Di Rocco, Federico; Oi, Shizuo

Source: Journal of neurosurgery; Aug 2005; vol. 103 (no. 2)

Publication Date: Aug 2005

Publication Type(s): Case Reports Journal Article Review

PubMedID: 16370291

Abstract: Hadju-Cheney syndrome (HCS) is a rare autosomal-dominant disorder with variable expressivity. It is characterized by facial dysmorphism, premature tooth loss, osteolysis of distal phalanges, and skull abnormalities. In some cases, progressive platybasia can occur and can lead to Chiari malformation with an obstruction of cerebrospinal fluid flow. To the best of the authors' knowledge, only five cases of HCS-associated syringomyelia have been reported in the literature. Because of the rarity of this association, little is known about its natural history. The authors present the case of a 16-year-old boy affected by HCS. On initial magnetic resonance (MR) imaging, a severe basilar invagination with Chiari malformation and cervicothoracic syringomyelia was documented. The syringomyelia had no clinical manifestations. A repeated MR image demonstrated a spontaneous resolution of the syrinx with no changes in the tonsil or the platybasia. The regression of the syringomyelia was confirmed by a control MR imaging examination performed after a 2-year period. No changes in the patient's clinical conditions were found during the follow-up period. This is the first case of spontaneous regression of the syringomyelia despite a severe platybasia in HCS. It did not appear correlated to a modification of the tonsil's structure or position. This observation illustrates one possible evolution of syringomyelia in the natural history of HCS and raises the question of the potential mechanisms involved in the spontaneous drainage of the syringomyelic cavity.

Database: Medline

18. Spontaneous resolution of a Chiari I malformation associated syringomyelia in a child

Author(s): Guillen A.; Costa J.M.; Cohen A.

Source: Acta Neurochirurgica; Feb 2004; vol. 146 (no. 2); p. 187-191

Publication Date: Feb 2004

Publication Type(s): Article

PubMedID: 14963755

Available at Acta Neurochirurgica - from SpringerLink

Available at Acta Neurochirurgica - from ProQuest (Hospital Premium Collection) - NHS Version

Abstract:A child with complete spontaneous resolution of a Chiari I malformation associated Syringomyelia without surgical intervention is presented. The child was followed clinically by serial magnetic resonance imaging (MRI) and remains neurologically stable after 8-years of follow-up. To our knowledge, only 6 pediatric cases with spontaneous resolution of a spinal cord syrinx documented by MRI without surgical intervention have been reported. This case is of interest in the light of the postulated theories to explain spontaneous resolution of syringomyelia.

Database: EMBASE

19. Spontaneous resolution of syringomyelia: Report of two cases and review of the literature

Author(s): Kyoshima K.; Bogdanov E.I.; Milhorat T.H.; Benzel E.C.; Papadopoulos S.; Batzdorf U.

Source: Neurosurgery; Sep 2003; vol. 53 (no. 3); p. 762-769

Publication Date: Sep 2003

Publication Type(s): Article

PubMedID: 12943593

Available at Neurosurgery - from Ovid (Journals @ Ovid)

Available at Neurosurgery - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:OBJECTIVE AND IMPORTANCE: The natural history of syringomyelia is highly unpredictable, and some patients experience improvement of stabilization without surgery. However, the mechanisms of the formation and spontaneous resolution of syringomyelia remain controversial. This report concerns two patients with syringomyelia who demonstrated spontaneous reductions in syrinx size, accompanied by symptomatic improvement. CLINICAL PRESENTATION: One patient was a 10-year-old girl with syringomyelia associated with a tight cisterna magna and basilar impression, who demonstrated a spontaneous decrease in syrinx size, accompanied by symptomatic improvement, in 22 months. The other patient was a 39-year-old man with syringomyelia associated with a Chiari I malformation, who demonstrated a spontaneous reduction in syrinx size and neurological improvement, accompanied by elevation of the cerebellar tonsils, 6 months after diagnosis. INTERVENTION: The patients were monitored. CONCLUSION: The mechanisms of spontaneous resolution of syringomyelia, as well as the factors leading to the cerebrospinal fluid flow disturbances that cause syringomyelia, may vary. Resolution of foramen magnum lesion-related syringomyelia may be the result of spontaneous correction of the abnormal cerebrospinal fluid flow, as observed in our cases, or of cavity fluid drainage into the spinal arachnoid space because of spinal cord fissuring.

Database: EMBASE

20. Complete spontaneous resolution of childhood Chiari I malformation and associated syringomyelia

Author(s): Sun P.P.; Harrop J.; Sutton L.N.; Younkin D.

Source: Pediatrics; 2001; vol. 107 (no. 1); p. 182-185

Publication Date: 2001

Publication Type(s): Article

PubMedID: 11134457

Available at Pediatrics - from HighWire - Free Full Text

Available at Pediatrics - from Patricia Bowen Library & Knowledge Service West Middlesex University Hospital NHS Trust (lib302631) Local Print Collection [location] : Patricia Bowen Library and Knowledge Service West Middlesex university Hospital.

Abstract: The diagnosis of Chiari I malformation and associated syringomyelia is often made in childhood. Since the advent of magnetic resonance imaging, these abnormalities are increasingly detected incidentally. Despite incomplete understanding of the natural history of asymptomatic Chiari I malformations, the current recommendation is to consider prophylactic surgical intervention in those with an associated syringomyelia. This case report presents a complete spontaneous resolution of a Chiari I malformation and syringomyelia in a child. It illustrates the possibility that asymptomatic children with Chiari I malformations and syringomyelia may be followed conservatively.

Database: EMBASE

21. Spontaneous resolution of Chiari I malformation and syringomyelia: Case report and review of the literature

Author(s): Klekamp J.; Iaconetta G.; Samii M.

Source: Neurosurgery; 2001; vol. 48 (no. 3); p. 664-667

Publication Date: 2001

Publication Type(s): Article

PubMedID: 11270558

Available at Neurosurgery - from Ovid (Journals @ Ovid)

Available at Neurosurgery - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:OBJECTIVE AND IMPORTANCE: Indications for surgery and the surgical technique of foramen magnum decompression for patients with Chiari I malformation and syringomyelia are controversial issues. This case report supports the view that observation may be adequate for patients without progressive symptoms or with mild clinical symptoms. CLINICAL PRESENTATION: A 37-year-old woman presented with a 3-month history of burning dysesthesias and hypesthesia in her right arm. A neurological examination revealed hypesthesia in the right trigeminal distribution. A magnetic resonance imaging scan revealed a Chiari I malformation with syringomyelia between C2 and T2. No hydrocephalus was observed. CLINICAL COURSE: Because the patient's symptoms regressed spontaneously, surgery was not performed. Thirty-two months after her initial examination, the patient was asymptomatic. A second magnetic resonance imaging scan was obtained, which demonstrated complete spontaneous resolution of the Chiari I malformation and syringomyelia. CONCLUSION: We attribute the regression of the patient's symptoms to spontaneous recanalization of cerebrospinal fluid pathways at the foramen magnum, which most likely was due to rupture of the arachnoid membranes that had obstructed cerebrospinal fluid flow.

Database: EMBASE

22. Spontaneous resolution and recurrence of a Chiari I malformation and associated syringomyelia: Case report

Author(s): Steinbok P.; Sun J.C.L.; Cochrane D.D.

Source: Journal of Neurosurgery; Apr 2000; vol. 92 (no. 2); p. 207-210

Publication Date: Apr 2000

Publication Type(s): Article

PubMedID: 10763693

Abstract: The spontaneous resolution of syringomyelia has been reported infrequently. In patients with Chiari I malformations, resolution of the syringomyelia has sometimes been associated with improvement of their malformation. The authors present a case of spontaneous resolution followed by recurrence of syringomyelia and a corresponding change in the Chiari malformation. This case is of interest in light of the theories postulated to explain spontaneous resolution of syringomyelia.

Database: EMBASE

23. Spontaneous resolution of a Cervicothoracic syrinx in a child. Case report and review of the literature

Author(s): Avellino A.M.; Britz G.W.; Ellenbogen R.G.; Roberts T.S.; Shaw D.W.; McDowell J.R.

Source: Pediatric Neurosurgery; Jan 1999; vol. 30 (no. 1); p. 43-46

Publication Date: Jan 1999

Publication Type(s): Article

PubMedID: 10202308

Available at Pediatric Neurosurgery - from ProQuest (Hospital Premium Collection) - NHS Version

Abstract:A child with near complete spontaneous resolution of a cervicothoracic syrinx and improvement in a Chiari type I malformation without surgical intervention is presented. The child was followed clinically with serial magnetic resonance (MR) imaging and has remained neurologically stable over an 11-year period. To our knowledge, only 3 pediatric cases of spontaneous resolution of a spinal cord syrinx as documented by MR imaging without surgical intervention have been reported. This case contributes to the literature on the natural history of syringes.

Database: EMBASE

24. Spontaneous drainage in syringomyelia

Author(s): Sudo K.; Tashiro K.; Isu T.

Source: Journal of neurosurgery; May 1994; vol. 80 (no. 5); p. 950-951

Publication Date: May 1994

Publication Type(s): Note

PubMedID: 8169644

Database: EMBASE

25. Spontaneous drainage of syringomyelia. Report of two cases

Author(s): Santoro A.; Delfini R.; Innocenzi G.; Di Biasi C.; Trasimeni G.; Gualdi G.

Source: Journal of Neurosurgery; 1993; vol. 79 (no. 1); p. 132-134

Publication Date: 1993

Publication Type(s): Article

PubMedID: 8315453

Abstract: Two cases are reported of Arnold-Chiari type I malformation associated with syringomyelia, in which magnetic resonance (MR) imaging revealed spontaneous decompression of the syrinx. In one case axial MR imaging sections showed a communication between the syrinx and the spinal subarachnoid space, which supports the hypothesis that fissuring of the cord parenchyma is instrumental in the spontaneous resolution of syringomyelia. The MR imaging changes were not accompanied by variations in the patients' clinical course.

Database: EMBASE

26. Chiari I malformation with traumatic syringomyelia and spontaneous resolution: Case report and literature review

Author(s): Olivero W.C.; Dinh D.H.; Niijima K.; Camins M.B.; Park T.S.

Source: Neurosurgery; 1992; vol. 30 (no. 5); p. 758-760

Publication Date: 1992

Publication Type(s): Article

PubMedID: 1584390

Available at Neurosurgery - from Ovid (Journals @ Ovid)

Available at Neurosurgery - from Ovid (LWW Total Access Collection 2015 - Q1 with Neurology)

Abstract:A case history of a 28-year-old woman who sustained a moderately severe head injury and then developed acute bilateral arm weakness is presented. Magnetic resonance imaging studies revealed a Chiari I malformation with a large cervical syringomyelia (hydromyelia). The patient's arm weakness almost completely resolved spontaneously as did her syrinx. How this case is interpreted in light of the various theories of pathogenesis will be discussed.

Database: EMBASE

27. Spontaneous decompression of syringomyelia: magnetic resonance imaging findings. Case report.

Author(s): Jack, C R; Kokmen, E; Onofrio, B M

Source: Journal of neurosurgery; Feb 1991; vol. 74 (no. 2); p. 283-286

Publication Date: Feb 1991

Publication Type(s): Case Reports Journal Article

PubMedID: 1988600

Abstract: The case of a 30-year-old woman with Chiari I malformation and a cervicothoracic syrinx is presented. The patient was followed clinically over a 2 1/2-year period. Spontaneous and complete resolution of the syrinx, as documented by serial magnetic resonance studies, was accompanied by only a minimal change in objective symptomatology.

Database: Medline

28. Syringomyelia with spontaneous resolution.

Author(s): Sudo, K; Doi, S; Maruo, Y; Tashiro, K; Terae, S; Miyasaka, K; Isu, T

Source: Journal of neurology, neurosurgery, and psychiatry; May 1990; vol. 53 (no. 5); p. 437-438

Publication Date: May 1990

Publication Type(s): Letter Case Reports

PubMedID: 2351976

Database: Medline

Strategy 362284

#	Database	Search term	Results
1	Medline	exp "ARNOLD-CHIARI MALFORMATION"/	3090
2	Medline	(Chiari ADJ2 malformation).ti,ab	3229
3	Medline	(syringomyelia).ti,ab	3221
4	Medline	exp SYRINGOMYELIA/	3634
5	Medline	(1 OR 2)	4112
6	Medline	(3 OR 4)	4461
7	Medline	((resolv* OR resolut* OR remission OR regression) ADJ2 spontaneous*).ti,ab	16364
8	Medline	exp "REMISSION, SPONTANEOUS"/	18786
9	Medline	(7 OR 8)	31371
10	Medline	(5 AND 6 AND 9)	42
11	EMBASE	exp "ARNOLD CHIARI MALFORMATION"/	5039
12	EMBASE	(Chiari ADJ2 malformation).ti,ab	3700
13	EMBASE	(syringomyelia).ti,ab	3751
14	EMBASE	exp SYRINGOMYELIA/	4963
16	EMBASE	((resolv* OR resolut* OR remission OR regression) ADJ2 spontaneous*).ti,ab	21856
17	EMBASE	exp REMISSION/	135889

18	EMBASE	(16 OR 17)	150478
19	EMBASE	(11 OR 12)	5868
20	EMBASE	(13 OR 14)	5344
21	EMBASE	(18 AND 19 AND 20)	48
22	EMBASE	exp PREGNANCY/	684328
23	EMBASE	(18 AND 19 AND 22)	0
24	EMBASE	(18 AND 20 AND 22)	1
25	Medline	exp PREGNANCY/	825576
26	Medline	(6 AND 9 AND 25)	2