

Bijlage Zoekverantwoording

Onderzoeksvraag 1: niet-medicamenteuze behandeling

Wat is het effect van acupunctuur op hik bij patiënten in de palliatieve fase?

What is the effect of acupuncture on hiccups in patients in the palliative phase?

Patients	patients in the palliative phase with hiccups
Intervention	acupuncture
Comparator	pharmacological treatment, other non-pharmacological treatment for hiccups, sham-acupuncture, no treatment
Outcome	critical: hiccups (NRS, VAS), hiccup frequency, quality of life, sleep quality, patient satisfaction important: depression

Onderzoeksvraag 2: medicamenteuze behandeling

Wat is het effect van medicamenteuze behandeling op hik bij patiënten in de palliatieve fase?

What is the effect of pharmacological treatment on hiccups in patients in the palliative phase?

Patients	patients in the palliative phase with hiccups
Intervention	pharmacological treatment
Comparator	other pharmacological treatment, placebo, no treatment
Outcome	critical: hiccups (NRS, VAS), hiccup frequency, quality of life, sleep quality, patient satisfaction important: depression

Search strategy

The search of research question 1 and 2 was combined.

On January 15, 2021 the scientific literature is searched in databases OVID Medline, Embase and Cochrane Library. The search strings are shown in this appendix.

The literature has been selected systematically based on the following predefined criteria:

1. design: meta-analyses, systematic reviews, randomized controlled trials, controlled clinical trials
2. language: English, Dutch, French, German
3. publication dates: from inception to search date
4. the outcomes are reported

Literature was excluded when no quantitative data was presented, when the study population was not focused on hiccups or the palliative phase, or when the interventions did not include the listed pharmacological interventions or acupuncture.

Search results

The selection criteria were applied on the references yielded from the search. 3424 unique hits were screened on title and abstract (Table 1). Of these, 3296 were excluded. Of the remaining 128 papers, the full-text was retrieved. Based on the full-text, an additional 114 papers were excluded. Table 2 provides an overview of the excluded studies with reasons.

Table 1. Overall search results

Database	Number of hits
OVID Medline	1635
OVID PreMedline	26
EMBASE.com	2834
Cochrane Database of Systematic Reviews	1
CENTRAL	257
Total hits	4753
n excluded (language, duplicates)	1329
Total unique eligible hits	3424

Included studies

Research question 1

- Cheon S, Zhang X, Lee IS, Cho SH, Chae Y, Lee H. Pharmacopuncture for cancer care: A systematic review. Evidence-based Complementary and Alternative Medicine. 2014;2014.
- Choi TY, Lee MS, Ernst E. Acupuncture for cancer patients suffering from hiccups: a systematic review and meta-analysis. Complement Ther Med. 2012;20(6):447-55.
- Hongliang X, Xuemei C, Shizhao H, Chaofeng L. Acupuncture and cupping for treatment of hiccup in cases of cerebrovascular accident. J Tradit Chin Med. 2006;26(3):175-6.
- Hu XY, Trevelyan E, Chai QY, Wang CC, Fei YT, Liu JP, et al. Effectiveness and safety of using acupoint Shui Gou (GV 26): A systematic review and meta-analysis of randomized controlled trials. Acupuncture and Related Therapies. 2015;3(1):1-10.
- Moretto EN, Wee B, Wiffen PJ, Murchison AG. Interventions for treating persistent and intractable hiccups in adults. Cochrane Database Syst Rev. 2013(1):CD008768.
- Wang F, Gao Q-Q. Treatment of intractable hiccup with acupuncture in 56 cancer patients. J acu tuina sci. 2004; 2(5):28-9.
- Wu X, Chung VC, Hui EP, Ziea ET, Ng BF, Ho RS, et al. Effectiveness of acupuncture and related therapies for palliative care of cancer: overview of systematic reviews. Sci. 2015;5:16776.
- Yue J, Liu M, Li J, Wang Y, Hung ES, Tong X, et al. Acupuncture for the treatment of hiccups following stroke: a systematic review and meta-analysis. Acupunct Med. 2017;35(1):2-8.
- Zhang J-F, Wu Y-C, Fan Y-Z, Li S-S, Huang C-F. Acupuncture combined with herb decoction for intractable hiccup. World journal of acupuncture - moxibustion. 2017; 27(3):63-8.

Research question 2

- Adam E. A Systematic Review of the Effectiveness of Oral Baclofen in the Management of Hiccups in Adult Palliative Care Patients. J Pain Pall Care Pharmacother. 2020;34(1):43-54.
- Calsina-Berna A, Garcia-Gomez G, Gonzalez-Barboteo J, Porta-Sales J. Treatment of chronic hiccups in cancer patients: a systematic review. J Palliat Med. 2012;15(10):1142-50.
- Moretto EN, Wee B, Wiffen PJ, Murchison AG. Interventions for treating persistent and intractable hiccups in adults. Cochrane Database Syst Rev. 2013(1):CD008768.
- Steger M, Schneemann M, Fox M. Systemic review: the pathogenesis and pharmacological treatment of hiccups. Aliment Pharmacol Ther. 2015;42(9):1037-50.

The following two articles were also identified, but were already included in at least one of the included reviews:

- Wang T, Wang D. Metoclopramide for patients with intractable hiccups: a multicentre, randomised, controlled pilot study. Intern Med J. 2014;44(12a):1205-9.
- Zhang C, Zhang R, Zhang S, Xu M, Zhang S. Baclofen for stroke patients with persistent hiccups: a randomized, double-blind, placebo-controlled trial. Trials. 2014;15:295.

Excluded studies

Table 2 provides an overview of the excluded studies with reasons.

Table 2. Overview of excluded studies based on full-text evaluation

Reference	Reason for exclusion
Alderfer BS, Arciniegas DB. Treatment of intractable hiccups with olanzapine following recent severe traumatic brain injury. J Neuropsychiatry Clin Neurosci. 2006;18(4):551-2.	Letter
Bao F, Liang Z, Wang F. Clinical observation on treatment of stubborn hiccup by acupuncture with different needle retaining time. world j acup-moxi. 2003; 13(02):50-4.	Chinese
Bhalotra R. Baclofen therapy for intractable hiccoughs. J Clin Gastroenterol. 1990;12(1):122.	Case reports
Bilotta F, Rosa G. Nefopam for severe hiccups. N Engl J Med. 2000;343(26):1973-4.	Letter
Bobele M. Interactional treatment of intractable hiccups. Fam Process. 1989;28(2):191-206.	Narrative review

Reference	Reason for exclusion
Bobele M. Nonmedical management of intractable hiccups: a brief review of the literature. <i>Psychol Rep.</i> 1987;61(1):225-6.	Narrative review
Cai H. Acupuncture on Neiguan Acupoint (PC 6) and Zusanli Acupoint (ST 36) for hiccup in 97 cases. <i>jiang su zhong yi.</i> 1996;17(7):37.	Chinese
Calvo E, Fernandez-La Torre F, Brugarolas A. Cervical phrenic nerve block for intractable hiccups in cancer patients. <i>J Natl Cancer Inst.</i> 2002;94(15):1175-6.	Letter, wrong intervention
Chen J. Observation and care of acupressure for preventing hiccups after interventional therapy of liver cancer. <i>dang dai hu shi.</i> 2009; 5(10):35-6.	Chinese
Chen X, Wu X. Treatment of intractable hiccup with baclofen. <i>Chinese new drugs journal.</i> 2000; 9(5):334-5.	Chinese
Chen X. Acupuncture treatment for 57 cases of hiccup. <i>J Tradit Chin Med.</i> 2002;22(3):195-6.	No control group
ChiCtr I. Randomized clinical trials of ankle-wrist acupuncture treating intractable hiccup. http://www.who.int/trialsearch/Trial2.aspx?TrialID=ChiCTR-IPR-17011451 .	Trial protocol
ChiCtr T. Baclofen for stroke patients with hiccups: a randomized controlled trial. http://www.who.int/trialsearch/Trial2.aspx?TrialID=ChiCTR-TRC-14004554 . 2014.	Trial protocol
Cui LZJ, Shang D, Du L. Clinical observation of lidocaine integrated with Acupuncture Treatment for treating intractable hiccup. <i>shan xi yi yao za zhi.</i> 2013; 42(4):453-5.	Chinese
D'Alessandro DJ, Dever LL. Baclofen for treatment of persistent hiccups in HIV-infected patients. <i>Aids.</i> 1997;11(8):1063-4.	Letter
Dunst MN, Margolin K, Horak D. Lidocaine for severe hiccups. <i>N Engl J Med.</i> 1993;329(12):890-1.	Letter
Fodstad H, Nilsson S. Intractable singultus: a diagnostic and therapeutic challenge. <i>Br J Neurosurg.</i> 1993;7(3):255-60.	Case reports, narrative review
Friedgood CE, Ripstein CB. Chlorpromazine (thorazine) in the treatment of intractable hiccups. <i>Jama.</i> 1955;157(4):309-10.	No control group
Friedman NL. Hiccups: A treatment review. <i>Pharmacotherapy.</i> 1996;16(6 I):986-95.	Narrative review
Fry EN. Management of intractable hiccup. <i>Br Med J.</i> 1977;2(6088):704.	Letter
Ge AX, Ryan ME, Giaccone G, Hughes MS, Pavletic SZ. Acupuncture treatment for persistent hiccups in patients with cancer. <i>J Altern Complement Med.</i> 2010;16(7):811-6.	No control group
Geng C, Zhang Y, Xu G, Gong H, Zhu J, Liao C. Observation and nursing care of curative effect of point injection with angelica injection for intractable hiccup patients. <i>hu li yan jiu.</i> 2012; 26(17):1590.	Chinese
Gigot AF, Flynn PD. Treatment of hiccups. <i>Jama.</i> 1952;150(8):760-4.	Narrative review
Got T, Vivas L, Fan C, MacNeill H. Treatment of hiccups in stroke rehabilitation with gabapentin: A case series and focused clinical review. <i>Top.</i> 2020:1-6.	Case reports, narrative review
Gou J. Acupuncture combined with cupping therapy for 30 cases of intractable hiccup. <i>World Journal of Acupuncture - Moxibustion.</i> 2018;28(1):66-7.	Abstract, no control group
Grant JA, Steiner EM, Johnson RH. Treatment of persistent hiccups. <i>J Neurol Neurosurg Psychiatry.</i> 1991;54(5):468.	Letter
Gries E, Singer MV. Singultus: Causes and treatment. <i>Dtsch Med Wochenschr.</i> 1987;112(45):1749-53.	No full-text
Guelaud C, Similowski T, Bizec JL, Cabane J, Whitelaw WA, Derenne JP. Baclofen therapy for chronic hiccup. <i>Eur Respir J.</i> 1995;8(2):235-7.	No control group

Reference	Reason for exclusion
Hadjiyannacos D, Vlassopoulos D, Hadjiconstantinou V. Treatment of intractable hiccup in haemodialysis patients with baclofen. <i>Am J Nephrol</i> . 2001;21(5):427-8.	Letter
Han H, Zhu X, Bai P. Clinical observation to 40 cases of refractory hiccup treated by Point Injection of Bufonin. <i>Chinese traditional patent medicine</i> . 2006; 28(6):934.	Chinese
Hernandez JL, Fernandez-Miera MF, Sampedro I, Sanroma P. Nimodipine treatment for intractable hiccups. <i>Am J Med</i> . 1999;106(5):600.	Letter
Hernandez JL, Pajaron M, Garcia-Regata O, Jimenez V, Gonzalez-Macias J, Ramos-Estebanez C. Gabapentin for intractable hiccup. <i>Am J Med</i> . 2004;117(4):279-81.	Letter
Howard RS, Charmers RM. Causes and treatment of persistent hiccups. <i>Natl Med J India</i> . 1996;9(3):104-6.	Opinion
Howard RS. Persistent hiccups. <i>Bmj</i> . 1992;305(6864):1237-8.	Opinion
Hu J. Acupuncture treatment of hiccup. <i>J Tradit Chin Med</i> . 2002;22(2):148-51.	Case report
Huang M, Wang H. Clinical observation of intractable hiccup treated by Chinese medicine in 35 cases of advanced hepatic carcinoma. <i>shanghai zhong yi yao za zhi</i> . 2010; 44(1):36-8.	Chinese
Ikeda A, Matsuoka K, Nakaya Y, Shibasaki H. Hiccups start, seizures cease. <i>Ann Neurol</i> . 2001;50(1):128-9.	Letter
Jacobson PL, Messenheimer JA, Farmer TW. Treatment of intractable hiccups with valproic acid. <i>Neurology</i> . 1981;31(11):1458-60.	No control group
Jeon YS, Kearney AM, Baker PG. Management of hiccups in palliative care patients. <i>BMJ support</i> . 2018;8(1):1-6.	Narrative (Medline) review
Jiang F. Stubborn hiccup treated with thumb-tack needles and needle-embedding on otopoint. <i>Journal of clinical acupuncture and moxibustion</i> . 2002; 18(2):36.	Chinese
Jprn U. A novel treatment for persistent intractable hiccups : continuous cervical epidural block. http://www.who.int/trialsearch/Trial2.aspx?TrialID=JPRN-UMIN000015213 . 2014.	Trial protocol
Kolodzik PW, Eilers MA. Hiccups (singultus): review and approach to management. <i>Ann Emerg Med</i> . 1991;20(5):565-73.	Narrative review
Kovacova B. Medication treatment of singultus in palliative care. <i>Cas Lek Cesk</i> . 2019;158(7-8):306-9.	Czech
Lamphier TA. Methods of management of persistent hiccup (singultus). <i>Md State Med J</i> . 1977;26(11):80-1.	Text book
Launois S, Bizec JL, Whitelaw WA, Cabane J, Derenne JP. Hiccup in adults: an overview. <i>Eur Respir J</i> . 1993;6(4):563-75.	Narrative review
Lemée JM, Chinier E, Bernard F, Gallet C, Menei P. Intrathecal baclofen infusion for spastic intractable hiccups. <i>Annals of Physical and Rehabilitation Medicine</i> . 2020.	Letter
Leung AKC, Leung AAM, Wong AHC, Hon KL. Hiccups: A Non-Systematic Review. <i>Current pediatric reviews</i> . 2020.	DRM
Lewis JH. Hiccups: causes and cures. <i>J Clin Gastroenterol</i> . 1985;7(6):539-52.	Narrative review
Li F, Wang D, Ma X. Treatment of hiccoughs with auriculoacupuncture. <i>J Tradit Chin Med</i> . 1991;11(1):14-6.	No control group
Li J. Clinical observation of acupuncture combined with decoction in treatment of hiccup. <i>liao ning zhong yi za zhi</i> . 2014; 41(4):786-7.	Chinese

Reference	Reason for exclusion
Li J. Observation on curative effects of acupoint injection of metoclopramide and pressing YiFeng in treating intractable hiccup induced by radiotherapy and chemotherapy given to lung cancer patients. <i>xi bu zhong yi yao</i> . 2016; 29(3):111-3.	Chinese
Li X, Yi J, Qi B. Treatment of hiccough with auriculo-acupuncture and auriculo-pressure--a report of 85 cases. <i>J Tradit Chin Med</i> . 1990;10(4):257-9.	No control group
Li XB, Wu DJ, Yang MC. Acupuncture for hiccups: A systematic review protocol of high-quality randomized trials. <i>Medicine (Baltimore)</i> . 2019;98(51):e18343.	SR protocol
Liu JH. Observation on the effect of acupuncture and moxibustion combined with acupoint injection in the standardized treatment of intractable hiccup. <i>guang ming zhong yi</i> . 2016; 31(24):3631-2.	Chinese
Luan Z, Kui X, Ma M, Zhang H. The clinical observation of Dinxiang Shidi Tang for treating intractable hiccup caused by tumor in 30 cases. <i>he bei zhong yi</i> . 2005; 27(3):205.	Chinese
Ma R, Li Y, Liu S, Zhao W. Acupuncture for cancer-related hiccups: Protocol for a systematic review and meta-analysis of randomized controlled trials. <i>Medicine (Baltimore)</i> . 2020;99(20):e19973.	SR protocol
Macris SG, Gregory GA, Way WL. Methyphenidate for hiccups. <i>Anesthesiology</i> . 1971;34(2):200-1.	Letter
Mi Y-Q. Treatment of hiccup by acupuncture: a report of 274 cases. <i>Tcm shanghai journal of acupuncture and moxibustion</i> . 2000; 3(1):57.	No full-text
Moro C, Sironi P, Berardi E, Beretta G, Labianca R. Midazolam for long-term treatment of intractable hiccup. <i>J Pain Symptom Manage</i> . 2005;29(3):221-3.	Letter
Muehlenberg K, Weinerth J, Wiedmann KH. Short-acting anesthesia interrupts persistent hiccups. <i>Dtsch Med Wochenschr</i> . 2001;126(25-26):757.	DRM
Nasiri AA, Afsargharehbagh R, Sane S, Neisari R, Shargh A. Treatment of intractable hiccups using phrenic nerve block. <i>J Clin Anesth</i> . 2019;57:7-8.	Letter
Nct. Treatment of Chemotherapy-related Hiccups With Baclofen. https://clinicaltrials.gov/show/NCT03778281 . 2018.	Trial protocol
Okuda Y, Kitajima T, Asai T. Use of a nerve stimulator for phrenic nerve block in treatment of hiccups. <i>Anesthesiology</i> . 1998;88(2):525-7.	Case reports
Oneschuk D. The use of baclofen for treatment of chronic hiccups. <i>J Pain Symptom Manage</i> . 1999;18(1):4-5.	Letter
Orlovich DS, Brodsky JB, Brock-Utne JG. Nonpharmacologic Management of Acute Singultus (Hiccups). <i>Anesth Analg</i> . 2018;126(3):1091.	Letter
Parvin R, Milo R, Klein C, Arlazoroff A. Amitriptyline for intractable hiccup. <i>Am J Gastroenterol</i> . 1988;83(9):1007-8.	No full-text
Patial RK. Baclofen in the treatment of intractable hiccups. <i>J Assoc Physicians India</i> . 2002;50:1312-3.	Case report
Peabody CA, Dewitt J, Herrin S, Woodward-Smith MA, Warren MD. Intractable hiccups treated with amitriptyline. <i>Am J Psychiatry</i> . 1988;145(8):1036-7.	Letter
Petroianu G, Brunnengraber R. The treatment of hiccup. <i>Pharmazeutische Zeitung</i> . 1992;137(25):9-14.	No full-text
Petroianu GA, Lorke DE. The Role of Serotonin in Singultus: A Review. <i>Frontiers in Neuroscience</i> . 2020;14.	Narrative review
Phillips RA. The management of hiccups in terminally ill patients. <i>Nurs Times</i> . 2005;101(31):32-3.	Narrative review

Reference	Reason for exclusion
Polito NB, Fellows SE. Pharmacologic Interventions for Intractable and Persistent Hiccups: A Systematic Review. <i>J Emerg Med.</i> 2017;53(4):540-9.	No critical appraisal of included studies
Porzio G, Aielli F, Verna L, Aloisi P, Galletti B, Ficorella C. Gabapentin in the treatment of hiccups in patients with advanced cancer: a 5-year experience. <i>Clin Neuropharmacol.</i> 2010;33(4):179-80.	No control group
Qian L. Forty-five cases of hiccup treated by acupuncture at Suliao point. <i>J Tradit Chin Med.</i> 2006;26(4):256-7.	Chinese
Ramirez FC, Graham DY. Treatment of intractable hiccup with baclofen: results of a double-blind randomized, controlled, cross-over study. <i>Am J Gastroenterol.</i> 1992;87(12):1789-91.	No full-text
Reichenbach ZW, Piech GM, Malik Z. Chronic Hiccups. <i>Curr Treat Options Gastroenterol.</i> 2020;23:23.	Narrative review
Reiß M, Reiß G. Hiccups: Causes, diagnosis and treatment. <i>Med Monatsschr Pharm.</i> 2006;29(8):283-8.	No full-text
Rouse S, Wodziak M. Intractable Hiccups. <i>Curr Neurol Neurosci Rep.</i> 2018;18(8):51.	Narrative review
Rousseau P. Hiccups in patients with advanced cancer: A brief review. <i>Progress in Palliative Care.</i> 2003;11(1):10-2.	Narrative review
Rousseau P. Hiccups in terminal disease. <i>Am J Hosp Palliat Care.</i> 1994;11(6):7-10.	Opinion
Sanjay S, Manoharan B, Arun KN, Sundar S. Baclofen in the treatment of intractable hiccups. <i>J Assoc Physicians India.</i> 2003;51:324-5; author reply 5.	No full-text
Schlager A. Korean hand acupuncture in the treatment of chronic hiccups. <i>Am J Gastroenterol.</i> 1998;93(11):2312-3.	Letter
Shulan L. 47 cases of severe hiccup treated by auricular acupuncture. <i>Chinese Journal of Acupuncture and Moxibustion.</i> 1990;3(1):55-6.	Chinese
Smith HS, Busracamwongs A. Management of hiccups in the palliative care population. <i>Am J Hosp Palliat Care.</i> 2003;20(2):149-54.	Narrative review
Song A. Observation of therapeutic effects of acupuncture combined with acupoint injection on treating intractable hiccups after liver cancer interventional operation. <i>shan dong zhong yi za zhi.</i> 2009; 28(10):708-9.	Chinese
Stalnikowicz R, Fich A, Troudart T. Amitriptyline for intractable hiccups. <i>N Engl J Med.</i> 1986;315(1):64-5.	Letter; case report
Sui H, Zhang H. Observing the effect of treating malignant cancer with refractory hiccup with hydro-acupuncture. <i>zhong yi wu zhen xue za zhi.</i> 2009; 9(30):7360-1.	Chinese
Takahashi T, Murata T, Omori M, Tagaya M, Wada Y. Successful treatment of intractable hiccups with serotonin (5-HT)1A receptor agonist. <i>J Neurol.</i> 2004;251(4):486-7.	Letter
Tay SS, Yadav RR. Novel use of baclofen in cancer patients for the treatment of hiccups. <i>Ann Acad Med Singapore.</i> 2010;39(2):154.	Letter
Tegeler ML, Baumrucker SJ. Gabapentin for intractable hiccups in palliative care. <i>Am J Hosp Palliat Care.</i> 2008;25(1):52-4.	Narrative review
Travis S. Treatment of hiccoughs. <i>Lancet.</i> 1991;338(8765):520.	Letter
Viera AJ, Sullivan SA. Remedies for prolonged hiccups. <i>Am Fam Physician.</i> 2001;63(9):1684, 6.	Letter
Walker P, Watanabe S, Bruera E. Baclofen, a treatment for chronic hiccup. <i>J Pain Symptom Manage.</i> 1998;16(2):125-32.	Case reports

Reference	Reason for exclusion
Wang B. 80 cases of intractable hiccup treated by acupuncture. Chinese acupuncture and moxibustion. 2011; 31(2):181-2.	Chinese
Wang CL, Li XL. Observation on the effect of point stimulation in the treatment of intractable hiccups and nursing. <i>guang ming zhong yi</i> . 2016; 31(5):736-7.	Chinese
Wang Y. Comparative study of clinical curative effect of acupuncture treatment of hiccups by single-acupoint. <i>guang ming zhong yi</i> . 2015; 30(7):1478-9.	Chinese
Williams M. The management of hiccups in advanced cancer. <i>CME Cancer Medicine</i> . 2004;2(3):68-70.	No full-text
Woelk CJ. Managing hiccups. <i>Can Fam Physician</i> . 2011;57(6):672-5, e198-201.	Narrative review
Wong SK. Treatment of hiccough by acupuncture. <i>Med J Malaysia</i> . 1983;38(1):80-1.	No full-text
Wu Z, Su X. Hydro-acupuncture for treating hiccup resulting from stroke in 60 cases. <i>shang hai zhen jiu za zhi</i> . 2002; 21(4):32.	Chinese
Xing XR, Yin DF. Point injection combined with acupuncture in patients with advanced malignancies hiccup. <i>liao ning zhong yi za zhi</i> . 2016; 43(2):379-80.	Chinese
Yan G. Treatment of stubborn hiccup with point injection: clinical observation. <i>Int j clin acup</i> . 2002; 13(3):213.	No full-text
Yang H, Zhang R, Zhou J, Cheng Y, Li J, Xiao Q, et al. Acupuncture therapy for persistent and intractable hiccups: Protocol of a systematic review and meta-analysis. <i>Medicine (Baltimore)</i> . 2019;98(44):e17561.	SR protocol
Yang Q. Clinical curative effect of Chinese acupuncture in the treatment of patients with intractable hiccup. <i>she qu zhong yi yao</i> . 2016; 32(30):116-7.	Chinese
Yang T-H, Zhou Q-Y, Zhao K-Z. Clinical study of hiccup treated with electroacupuncture. <i>Journal of clinical acupuncture and moxibustion</i> . 2004; 20(3):30.	Chinese
Yang W. Treatment of 60 cases of hiccup by puncturing points lateral to haiquan. <i>J Tradit Chin Med</i> . 2001;21(4):289-90.	No control group
Yaqoob M, Prabhu P, Ahmad R. Baclofen for intractable hiccups. <i>Lancet</i> . 1989;2(8662):562-3.	Letter
Zaporowska-Stachowiak I, Szymanski K, Oduah MT, Stachowiak-Szymczak K, Luczak J, Sopata M. Midazolam: Safety of use in palliative care: A systematic critical review. <i>Biomed Pharmacother</i> . 2019;114:108838.	Narrative (Medline) review
Zhang A, Hou B. Chlorpromazine used in 43 cases of refractory hiccup. <i>Chinese journal of practical internal medicine</i> . 1989; 9(7):340.	Chinese
Zhang L, Fu J. 225 hiccup cases treated with electromagnetic impulses at erzhong point. <i>J Tradit Chin Med</i> . 1993;13(1):13.	No control group
Zhao H. Treating 45 cases of stroke intractable hiccup with the combination of traditional Chinese and Western therapy. <i>Chinese journal of information on traditional chinese medicine</i> . 2004; 11(2):159.	Chinese
Zhou L. Clinical observation of the effect of Jiangni Zhiou Tang combined with acupoints injection for treating hiccup after cerebral apoplexy. <i>zhe jiang zhong xi yi jie he za zhi</i> . 2010; 20(11):687.	Chinese
Zhou X, Xie J. Injecting baclofen and vitamin B12 into point for treating central intractable hiccup. <i>zhong yi yao dao bao</i> . 2012; 18(5):72-4.	Chinese

Search strings

MEDLINE (OVID)

1 hiccup/ (1123)

- 2 hic*up*.mp. (1552)
- 3 hic*ough*.mp. (126)
- 4 singult*.mp. (138)
- 5 1 or 2 or 3 or 4 (1635)

PREMEDLINE (OVID)

- 1 hiccup/ (0)
- 2 hic*up*.mp. (23)
- 3 hic*ough*.mp. (5)
- 4 singult*.mp. (3)
- 5 1 or 2 or 3 or 4 (26)

EMBASE (via EMBASE.COM)

- #1 hiccup'/exp (4040)
- #2 'hiccup therapy'/exp (29)
- #3 hic*up:ti,ab (772)
- #4 hic*ough*:ti,ab (211)
- #5 singult*:ti,ab (160)
- #6 #1 OR #2 OR #3 OR #4 OR #5 (4242)
- #7 (#1 OR #2 OR #3 OR #4 OR #5) AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim OR [french]/lim OR [german]/lim) (2834)

COCHRANE LIBRARY (VIA WILEY)

- #1 MeSH descriptor: [Hiccup] explode all trees (24)
- #2 (hic*up* or hic*ough* or singult*):ti,ab (252)
- #3 #1 OR #2 (258)