

Dokumentasjon av litteratursøk

Prosedyrens tittel eller arbeidstittel	Mekanisk hostestøtte – pasienter (voksne og barn) med sekretstagnasjon og nedsatt hostekraft
Spørsmål fra PICO-skjema	• Kan bruk av hostemaskin redusere/forhindre akutt lungeproblematikk m/sekretstagnasjon hos barn med sekretstagnasjon og nedsatt hostekraft. • Kan bruk av hostemaskin redusere/forhindre akutt lungeproblematikk m/sekretstagnasjon hos inneliggende voksne pasienter med sekretstagnasjon og nedsatt hostekraft. • Kan bruk av hostemaskin med oscillerende funksjon redusere/forhindre akutt lungeproblematikk m/sekretstagnasjon hos voksne pasienter med sekretstagnasjon og nedsatt hostekraft.
Kontaktdetaljer prosedyremakere	Elisabeth Bø elisbo@ous-hf.no
Bibliotekar som utførte/veiledet søket:	Marie Isachsen marie.isachsen@medisin.uio.no
Dato for søk:	26. februar 2024 Oppdatering av søk fra 11. november 2020

Database/ressurs:	Ehåndboka til OUS
Søkehistorie og treff	Søkt i hele nettstedet: cough, hoste, hostestøtte Mekanisk hostestøtte – pasienter (voksne og barn) med nedsatt hosteevne og sekretstagnasjon Oslo universitetssykehus https://ehandboken.ous-hf.no/document/2363 Hostereflekstesting/cough reflex testing (CRT) Oslo universitetssykehus https://ehandboken.ous-hf.no/document/134865 Fysioterapi for forebygging av postoperative lungekomplikasjoner Oslo universitetssykehus https://ehandboken.ous-hf.no/document/61782

	Pasientinformasjon: Hostereflekstesting (Cough reflex testing) Oslo universitetssykehus https://ehandboken.ous-hf.no/document/132980 Hostemaskin (cough assist) - pasientinformasjon Oslo universitetssykehus https://ehandboken.ous-hf.no/document/45691
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Database/ressurs:	Nasjonale anbefalinger, råd, pakkeforløp og pasientforløp fra Helsedirektoratet
Søkehistorie og treff:	Sett gjennom liste Retningslinjen under inneholder kapitlet: Fysioterapeuter bør tilby pasienter med kols individuelt tilpasset opplæring i pusteteknikker og sekretmobilisering Nasjonal faglig retningslinje for kols – diagnostisering og behandling Helsedirektoratet Først publisert: 01. november 2012. Siste faglige endring: 15. februar 2022 https://www.helsedirektoratet.no/retningslinjer/kols Retningslinjen under inneholder kapitlet: Hoste Nasjonal faglig retningslinje for palliasjon til barn og unge Helsedirektoratet https://www.helsedirektoratet.no/retningslinjer/palliasjon-til-barn-og-unge Er disse aktuelle? Nasjonal faglig retningslinje for langtids mekanisk ventilasjon(LTMV) er en kortversjon av Nasjonal veileder for langtids mekanisk ventilasjon (LTMV), her er lenke til begge: Nasjonal faglig retningslinje for langtids mekanisk ventilasjon (LTMV) – 2012 Helsedirektoratet Nasjonal veileder for langtids mekanisk ventilasjon (LTMV) – 2012 Helsedirektoratet

Database/ressurs:	Folkehelseinstituttet - rapporter og trykksaker
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Søkehistorie og treff:	Søkt i hele nettstedet: hostemaskin, hostestøtte Effekt av lungefunksjonstrening i akuttfasen for pasienter med traumatisk, høy ryggmargsskade: en systematisk oversikt Folkehelseinstituttet - 2017 https://www.fhi.no/publ/2017/effekt-av-lungefunksjonstrening-i-akuttfasen-for-pasienter-med-traumatisk-h/ Er øvrige aktuelle?: Effekt av langtids mekanisk ventilasjon (LTMV) del 1 – nevromuskulær sykdom eller svikt i sentral respirasjonsstyring Rapport fra Kunnskapssenteret - 2012 https://www.fhi.no/publ/2012/effekt-av-langtids-mekanisk-ventilasjon-ltmv-del-1---nevromuskular-sykdom-e/ Effekt av langtids mekanisk ventilasjonsstøtte (LTMV) del 2 – brystvegglidelser eller adipositas hypoventilasjonssyndrom Rapport fra Kunnskapssenteret - 2012 https://www.fhi.no/publ/2012/effekt-av-langtids-mekanisk-ventilasjonsstotte-ltmv-del-2--brystvegglidels/ Effekt av langtids mekanisk ventilasjon (LTMV) del 3 – kols og cystisk fibrose Rapport fra Kunnskapssenteret - 2014 https://www.fhi.no/publ/2014/effekt-av-langtids-mekanisk-ventilasjon-ltmv-del-3--kols-og-cystisk-fibrose/
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Database/ressurs:	Helsebibliotekets retningslinjebase
Søkehistorie og treff:	Sett gjennom emnegruppe Luftveier 0

Database/ressurs:	NICE Guidance (UK)
Søkehistorie og treff:	Cough assist Mechanical coughing Insufflation Exsufflation m.fl. Motor neurone disease: assessment and management NICE guideline [NG42] Published date: February 2016 Last updated: July 2019 https://www.nice.org.uk/guidance/NG42 Prospect Hospice (UK)

	Audit proposal to address cough augmentation for people with Motor Neurone Disease (MND) - a shared resource tool https://www.nice.org.uk/sharedlearning/audit-proposal-to-address-cough-augmentation-for-people-with-motor-neurone-disease-mnd-a-shared-resource-tool (I teksten: "The audit criteria were based upon the NICE guideline: NG42 Motor Neurone Disease: assessment and management")
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Database/ressurs:	Socialstyrelsen (Sve) - Nationella riktlinjer
Søkehistorie og treff:	Sett gjennom liste Ser ikke ut til å omtale hostemaskin: Nationella riktlinjer för vård vid astma och kroniskt obstruktiv lungsjukdom (KOL). Socialstyrelsen - 2020 https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/nationella-riktlinjer/2020-12-7135.pdf

Database/ressurs:	Vårdhandboken (SE)
Søkehistorie og treff:	Fulgt stien: Vård och behandling > Luftvägar > Andningsvård Fra lenken over finner dere bl.a disse: Andningsvård - Översikt Vårdhandboken (SE) https://www.vardhandboken.se/vard-och-behandling/luftvagar/andningsvard/oversikt/ Andningsbefrämjande tekniker Vårdhandboken (SE) https://www.vardhandboken.se/vard-och-behandling/luftvagar/andningsvard/andningsbeframjande-tekniker/ Andningsbefrämjande åtgärder Vårdhandboken (SE) https://www.vardhandboken.se/vard-och-behandling/luftvagar/andningsvard/andningsbeframjande-atgarder/

Database/ressurs:	Sundhedsstyrelsen - Kvalitet og retningslinjer (DK)
Søkehistorie og treff:	Finner ingen som omtaler hostemaskin/hostestøtte.

Database/ressurs:	Center for kliniske retningslinjer (DK)
Søkehistorie og treff:	Sett gjennom Godkente retningslinjer Klinisk retningslinje for fysioterapi til pasienter med Amyotrofisk Lateral Sclerose (ALS) - 2014 https://cfkr.dk/retningslinjer/godkendte-retningslinjer/aktivitet/kr-fysioterapi-als-1/

Database/ressurs:	Nursing Reference Center
Søkehistorie og treff:	1. (Cough* or oscillat* or insufflat* or exsufflat*): in Title 2. ("mechanical coughing" or "mechanical cough" or "cough assist" or coughassist or "assisted coughing" or "assisted cough" or "cough assistance" or "cough augmentation" or "Augmenting cough" or "Cough aid" or "oscillating device" or "oscillating devices" or "insufflation exsufflation" or "insufflator exsufflator" or "Mechanical in-exsufflator" or "Mechanical in-exsufflators" or "nippy clearway" or (pegaso and cough*) or ("airway clearance technique" and cough*) or ("airway clearance techniques" and cough*) or "coughing exercise" or "coughing exercises"): in All Text 3. 1 OR 2 Avgrenset til publikasjonstypene: Evidence Based Care Sheets og Skills. <i>For å få fulltekstlenkene til å virke: det kan være nødvendig å kopiere og lime inn lenkene inn i nettleserens adressefelt (URL-feltet), istedet for bare å klikke på dem</i> <u>Evidence Based Care Sheets</u> Assisted Coughing By: Mennella H, Schub T, Pravikoff D, CINAHL Nursing Guide, May 4, 2018 http://search.ebscohost.com/login.aspx?direct=true&db=nup&AN=T902979&site=nup-live&scope=site <u>Skills</u> Performing Chest Physical Therapy By: Schub E, Bentley-Henson A, Knowles A, Hanson D, CINAHL Nursing Guide, August 11, 2023 https://search.ebscohost.com/login.aspx?direct=true&db=nup&AN=T708111&site=nup-live&scope=site Performing Manual Chest Physiotherapy in Pediatric Patients By: Brannagan M,

	Neal P, Hanson D, CINAHL Nursing Guide, March 16, 2023 https://search.ebscohost.com/login.aspx?direct=true&db=nup&AN=T708113&site=nup-live&scope=site Postural Drainage: Performing By: Smith N, Schub T, Pravikoff D, CINAHL Nursing Guide, August 3, 2018 http://search.ebscohost.com/login.aspx?direct=true&db=nup&AN=T703848&site=nup-live&scope=site
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Database/ressurs:	UpToDate
Søkehistorie og treff:	Søkt separat på flere av disse kombinasjonene (hentet søkestrategi brukt til Nursing Reference Center Plus, og til Cochrane Database of Systematic Reviews) ("mechanical coughing" or "mechanical cough" or "cough assist" or coughassist or "assisted coughing" or "assisted cough" or "cough assistance" or "cough augmentation" or "Augmenting cough" or "Cough aid" or "oscillating device" or "oscillating devices" or "insufflation exsufflation" or "insufflator exsufflator" or "Mechanical in-exsufflator" or "Mechanical in-exsufflators" or "nippy clearway" or (pegaso and cough*) or ("airway clearance technique" and cough*) or ("airway clearance techniques" and cough*) or "coughing exercise" or "coughing exercises") Her er noen av treffene: De fem øverste har endrede titler siden siste søk i 2020 (men har samme lenke): Noninvasive ventilatory support and mechanical insufflation-exsufflation for patients with respiratory muscle dysfunction UpToDate. Waltham, MA. http://www.uptodate.com/contents/5116 Noninvasive ventilation in adults with chronic respiratory failure from neuromuscular and chest wall diseases: Patient selection and alternative modes of ventilatory support UpToDate. Waltham, MA. http://www.uptodate.com/contents/5114 Noninvasive ventilation in adults with chronic respiratory failure from neuromuscular and chest wall diseases: Practical aspects of initiation UpToDate. Waltham, MA. http://www.uptodate.com/contents/5118 Noninvasive ventilation in adults with chronic respiratory failure from

	neuromuscular and chest wall diseases: Adaptation and follow-up after initiation UpToDate. Waltham, MA. http://www.uptodate.com/contents/5123 Clinical and physiologic complications of mechanical ventilation: Overview UpToDate. Waltham, MA. http://www.uptodate.com/contents/1628 Duchenne and Becker muscular dystrophy: Management and prognosis UpToDate. Waltham, MA. http://www.uptodate.com/contents/6181 Respiratory muscle weakness due to neuromuscular disease: Management UpToDate. Waltham, MA. http://www.uptodate.com/contents/5124 Respiratory muscle weakness due to neuromuscular disease: Clinical manifestations and evaluation UpToDate. Waltham, MA. http://www.uptodate.com/contents/5121 Respiratory complications in the adult patient with chronic spinal cord injury UpToDate. Waltham, MA. http://www.uptodate.com/contents/5120 Spinal muscular atrophy UpToDate. Waltham, MA. http://www.uptodate.com/contents/6146 Myotonic dystrophy: Treatment and prognosis UpToDate. Waltham, MA. http://www.uptodate.com/contents/5140 Symptom-based management of amyotrophic lateral sclerosis UpToDate. Waltham, MA. http://www.uptodate.com/contents/5129 Role of mucoactive agents and secretion clearance techniques in COPD UpToDate. Waltham, MA. http://www.uptodate.com/contents/1456 Cystic fibrosis: Overview of the treatment of lung disease UpToDate. Waltham, MA. http://www.uptodate.com/contents/6372 Swallowing disorders and aspiration in palliative care: Assessment and strategies for management UpToDate. Waltham, MA. http://www.uptodate.com/contents/95508
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	Swallowing disorders and aspiration in palliative care: Definition, pathophysiology, etiology, and consequences UpToDate. Waltham, MA. http://www.uptodate.com/contents/85949 Assessment and management of dyspnea in palliative care UpToDate. Waltham, MA. http://www.uptodate.com/contents/14238 Bronchiectasis in adults: Maintaining lung health UpToDate. Waltham, MA. http://www.uptodate.com/contents/129310
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Database/ressurs:	SveMed+ OBS: Från och med januari 2020 uppdaterar Karolinska Institutet Universitetsbiblioteket inte längre SveMed+ med nytt material https://svemedplus.kib.ki.se/UpdateStatus.aspx Vurder derfor å søke aktuelle tidsskrifter på deres nettsider i tillegg.
Søkehistorie og treff:	1 exp:"Cough" 2 cough* 3 1 AND 2 Blant treffene er: Midgren B. Hostmaskinen – en manick med drag. Lung & Allergi Forum. 2017;1:19-20. Hov B, Hellem E, Nilsson BB. Airstacking med bag til barn og unge med nevromuskulær sykdom: Med eller uten ventil? Fysioterapeuten. 2016;83(2):18-23. https://fysioterapeuten-eblad.no/dm/fysioterapeuten-2-16/files/assets/basic-html/page-18.html Siewers V, Holmöy T, Frich JC. Experiences with using mechanical in-exsufflation in amyotrophic lateral sclerosis. European Journal of Physiotherapy. 2013;15(4):201-7. https://www.tandfonline.com/doi/full/10.3109/21679169.2013.834513

Database/ressurs:	The Cochrane Library (delbasen Cochrane Database of Systematic Reviews)
Søkehistorie og	

treff:	1. (Cough* or oscillat* or insufflat* or exsufflat*): in Title 2. ("mechanical coughing" or "mechanical cough" or "cough assist" or coughassist or "assisted coughing" or "assisted cough" or "cough assistance" or "cough augmentation" or "augmenting cough" or "cough aid" or "oscillating device" or "oscillating devices" or "insufflation exsufflation" or "insufflator exsufflator" or "Mechanical in-exsufflator" or "Mechanical in-exsufflators" or "nippy clearway" or (pegaso and cough*) or ("airway clearance technique" and cough*) or ("airway clearance techniques" and cough*) or "coughing exercise" or "coughing exercises"): in All Text 3. 1 OR 2 Avgrenset til 2012- Bokstavene/tallene ved hver publisasjon refererer til den unike Cochrane-ID-en. Hvis dere raskt vil se abstrakt, evt lenke videre til fulltekst: tast denne ID-en inn i søkeboksen til PubMed: https://pubmed.ncbi.nlm.nih.gov/?otool=inouolib OBS!! Velg da den nyeste versjonen, eldre versjoner av Cochrane Reviews kommer også opp i PubMed. CD007862 Wilson LM, Saldanha IJ, Robinson KA. Active cycle of breathing technique for cystic fibrosis. Cochrane Database Syst Rev. 2023(2). CD001401 Warnock L, Gates A. Airway clearance techniques compared to no airway clearance techniques for cystic fibrosis. Cochrane Database Syst Rev. 2023(4). CD013733 Smith S, Calthorpe R, Herbert S, Smyth AR. Digital technology for monitoring adherence to inhaled therapies in people with cystic fibrosis. Cochrane Database Syst Rev. 2023(2). CD014605 Pinto AN, Piva SR, Rocha A, Gomes-Neto M, Atallah Á, Saconato H, et al. Digital technology for delivering and monitoring exercise programs for people with cystic fibrosis. Cochrane Database Syst Rev. 2023(6). CD002011 Main E, Rand S. Conventional chest physiotherapy compared to other airway clearance techniques for cystic fibrosis. Cochrane Database Syst Rev. 2023(5).
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	CD013610 Jones M, Moffatt F, Harvey A, Ryan JM. Interventions for improving adherence to airway clearance treatment and exercise in people with cystic fibrosis. Cochrane Database Syst Rev. 2023(7). CD013766 Dawson S, Girling CJ, Cowap L, Clark-Carter D. Psychological interventions for improving adherence to inhaled therapies in people with cystic fibrosis. Cochrane Database Syst Rev. 2023(3). CD002768 Radtke T, Smith S, Nevitt SJ, Hebestreit H, Kriemler S. Physical activity and exercise training in cystic fibrosis. Cochrane Database Syst Rev. 2022(8). CD013485 Osadnik CR, Gleeson C, McDonald VM, Holland AE. Pulmonary rehabilitation versus usual care for adults with asthma. Cochrane Database Syst Rev. 2022(8). CD013285 Heinz KD, Walsh A, Southern KW, Johnstone Z, Regan KH. Exercise versus airway clearance techniques for people with cystic fibrosis. Cochrane Database Syst Rev. 2022(6). CD006338 Chen X, Jiang J, Wang R, Fu H, Lu J, Yang M. Chest physiotherapy for pneumonia in adults. Cochrane Database Syst Rev. 2022(9). CD013170 Morrow B, Argent A, Zampoli M, Human A, Corten L, Toussaint M. Cough augmentation techniques for people with chronic neuromuscular disorders. Cochrane Database Syst Rev. 2021(4). CD013110 Lee AL, Gordon CS, Osadnik CR. Exercise training for bronchiectasis. Cochrane Database Syst Rev. 2021(4). CD009595 Burnham P, Stanford G, Stewart R. Autogenic drainage for airway clearance in cystic fibrosis. Cochrane Database Syst Rev. 2021(12). CD006842 Morrison L, Milroy S. Oscillating devices for airway clearance in people with cystic fibrosis. Cochrane Database Syst Rev. 2020(4). CD011231 Wilson LM, Morrison L, Robinson KA. Airway clearance techniques for cystic fibrosis: an overview of Cochrane systematic reviews. Cochrane Database Syst Rev. 2019(1).
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	CD003147 McIlwaine M, Button B, Nevitt SJ. Positive expiratory pressure physiotherapy for airway clearance in people with cystic fibrosis. Cochrane Database Syst Rev. 2019(11). CD010277 Chaves GSS, Freitas DA, Santino TA, Nogueira P, Fregonezi GAF, Mendonça K. Chest physiotherapy for pneumonia in children. Cochrane Database Syst Rev. 2019(1). CD010297 Freitas DA, Chaves GSS, Santino TA, Ribeiro CTD, Dias FAL, Guerra RO, et al. Standard (head-down tilt) versus modified (without head-down tilt) postural drainage in infants and young children with cystic fibrosis. Cochrane Database Syst Rev. 2018(3). CD011833 Rose L, Adhikari NKJ, Leasa D, Fergusson DA, McKim D. Cough augmentation techniques for extubation or weaning critically ill patients from mechanical ventilation. Cochrane Database Syst Rev. 2017(1). CD004427 Radunovic A, Annane D, Rafiq MK, Brassington R, Mustfa N. Mechanical ventilation for amyotrophic lateral sclerosis/motor neuron disease. Cochrane Database Syst Rev. 2017(10). CD002769 Moran F, Bradley JM, Piper AJ. Non-invasive ventilation for cystic fibrosis. Cochrane Database Syst Rev. 2017(2). CD008380 Luo F, Annane D, Orlikowski D, He L, Yang M, Zhou M, et al. Invasive versus non-invasive ventilation for acute respiratory failure in neuromuscular disease and chest wall disorders. Cochrane Database Syst Rev. 2017(12). CD011699 Lee AL, Burge AT, Holland AE. Positive expiratory pressure therapy versus other airway clearance techniques for bronchiectasis. Cochrane Database Syst Rev. 2017(9). CD004873 Roqué i Figuls M, Giné-Garriga M, Granados Rugeles C, Perrotta C, Vilaró J. Chest physiotherapy for acute bronchiolitis in paediatric patients between 0 and 24 months old. Cochrane Database Syst Rev. 2016(2). CD001401 Warnock L, Gates A. Chest physiotherapy compared to no chest physiotherapy for cystic fibrosis. Cochrane Database Syst Rev. 2015(12). CD008351
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	Lee AL, Burge AT, Holland AE. Airway clearance techniques for bronchiectasis. Cochrane Database Syst Rev. 2015(11). CD001941 Annane D, Orlikowski D, Chevret S. Nocturnal mechanical ventilation for chronic hypoventilation in patients with neuromuscular and chest wall disorders. Cochrane Database Syst Rev. 2014(12). CD010044 Morrow B, Zampoli M, van Aswegen H, Argent A. Mechanical insufflation-exsufflation for people with neuromuscular disorders. Cochrane Database Syst Rev. 2013(12). CD008328 Osadnik CR, McDonald CF, Jones AP, Holland AE. Airway clearance techniques for chronic obstructive pulmonary disease. Cochrane Database Syst Rev. 2012(3).
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Database/ressurs:	Ovid MEDLINE
Søkehistorie og treff:	1 Mechanical coughing.ti,ab. 2 Mechanical cough.ti,ab. 3 Cough assist.ti,ab. 4 Coughassist.ti,ab. 5 Assisted coughing.ti,ab. 6 Assisted cough.ti,ab. 7 Cough assistance.ti,ab. 8 Cough augmentation.ti,ab. 9 Augmenting cough.ti,ab. 10 Cough aid.ti,ab. 11 oscillating device.ti,ab. 12 oscillating devices.ti,ab. 13 insufflation exsufflation.ti,ab. 14 insufflator exsufflator.ti,ab. 15 Mechanical in-exsufflator*.ti,ab. 16 nippy clearway.ti,ab. 17 (pegaso and cough*).ti,ab. 18 (airway clearance technique* and cough*).ti,ab. 19 coughing exercise*.ti,ab 20 or/1-19 21 limit 20 to yr="2020 -Current" 22 limit 21 to (danish or english or norwegian or swedish) 23 cochrane*.jn. 24 22 not 23 (117 artikler, etter å ha fjernet artikler fra 2020 som kom med på forrige treffliste fra søket i 2020) Kommentar:

	Har her fjernet systematiske oversikter fra Cochrane Database of Systematic Reviews (se disse i den basen over). Treffliste med 117 artikler Tallene ved hver artikkel refererer til den unike ID-en til artikkelen i PubMed/Medline. Hvis dere raskt vil se abstrakt, evt lenke videre til fulltekst: tast dette tallet inn i søkeboksen til PubMed: https://pubmed.ncbi.nlm.nih.gov/?otool=inouolib 38307525 Sanchez-Garcia M, Alvarez-Gonzalez M, Domingo-Marin S, Del Pino-Ramirez A, Martinez-Sagasti F, Gonzalez-Arenas P, et al. Comparison of Mechanical Insufflation-Exsufflation and Hypertonic Saline with Hyaluronic Acid with Conventional Open Catheter Suctioning in Intubated Patients. <i>Respir Care</i>. 2024;02:02. 37816542 McHenry KL. Airway Clearance Strategies and Secretion Management in Amyotrophic Lateral Sclerosis. <i>Respir Care</i>. 2024;69(2):227-37. 38196892 Hov B, Andersen T, Toussaint M, Mikalsen IB, Vollsaeter M, Brunborg C, et al. Mechanically assisted cough strategies: user perspectives and cough flows in children with neurodisability. <i>ERJ open res</i>. 2024;10(1). 38362833 Gambazza S, Mariani A, Guarise R, Ferrari B, Carta F, Brivio A, et al. Short-term effects of positive expiratory pressure mask on ventilation inhomogeneity in children with cystic fibrosis: A randomized, sham-controlled crossover study. <i>Pediatr Pulmonol</i>. 2024;16:16. 38302072 Andersson-Watz A, Nygren-Bonnier M, Bergdahl E, Crommert ME, Svantesson M. Introducing Mechanically Assisted Cough for Patients with Progressive Neurological Disease: Patient-Physical Therapist Interaction and Physical Therapist Perspective. <i>Phys Ther</i>. 2024;01:01. 36521679 Zheng R, Guan B, Fan Y, Fu R, Yao L, Wang W, et al. A critical appraisal of clinical practice guidelines for management of four common complications after spinal cord injury. <i>Spine J</i>. 2023;23(6):888-99. 37712806 Wibart P, Reginault T, Garcia-Fontan M, Barbrel B, Bader C, Benard A, et al. Effects of mechanical in-exsufflation in preventing postextubation acute respiratory failure in intensive care acquired weakness patients: a randomized controlled trial. <i>Crit Care Sci</i>. 2023;35(2):168-76. 37712806
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