File S2. Search strategy for each database and other source

Postoperative chest tube management in paediatric cardiac surgery: a systematic review for nursing practice
Nursing Reports, manuscript nursrep-4637169. Reported in accordance with PRISMA-S.

Five bibliographic databases were searched between 18 and 20 May 2026. The same Boolean string was run in the default search field of each database. It combined three concept blocks with AND: paediatric population terms; cardiac surgical and congenital heart disease terms; and chest-drain terms. Terms within each block were combined with OR, and only free-text terms were used. Results were limited to English-language publications with each database's language filter; because no language filter is available in the Cochrane Library, non-English records from that source were excluded at screening. No study-design filter, date restriction or geographical restriction was applied.

Source	Interface	Date searched	Records retrieved
MEDLINE via PubMed	PubMed (US National Library of Medicine)	18 May 2026	288
CINAHL	CINAHL via EBSCOhost	19 May 2026	198
Scopus	Scopus (Elsevier)	20 May 2026	76
Cochrane Central Register of Controlled Trials (CENTRAL)	Cochrane Library (Wiley)	20 May 2026	31
Web of Science Core Collection	Web of Science (Clarivate)	20 May 2026	82
Total, before de-duplication			**675**

MEDLINE via PubMed

Date searched: 18 May 2026. Records retrieved: 288. Field searched: All Fields (default search). Limits: English language.

("pediatric" OR "paediatric" OR "child" OR "children" OR "infant" OR "neonate" OR "neonatal") AND ("cardiac surger*" OR "heart surger*" OR "congenital heart" OR "cardiopulmonary bypass" OR "open heart" OR thoracotomy OR sternotomy OR Fontan OR Norwood OR Glenn OR "tetralogy of Fallot" OR "atrial septal defect" OR "ventricular septal defect" OR "transposition of the great arteries" OR "single ventricle" OR "arterial switch" OR "biventricular repair") AND ("chest tube" OR "chest drain*" OR "thoracostomy tube*" OR "thoracic drain*" OR "mediastinal drain*" OR "mediastinal tube*" OR "pleural drain*" OR "pleural tube*" OR "pericardial drain*" OR "pericardial tube*" OR "intercostal drain*" OR "intercostal tube*" OR "underwater seal*" OR "water seal*")

CINAHL

Date searched: 19 May 2026. Records retrieved: 198. Field searched: default search field (no field selected). Limits: English language.

("pediatric" OR "paediatric" OR "child" OR "children" OR "infant" OR "neonate" OR "neonatal") AND ("cardiac surger*" OR "heart surger*" OR "congenital heart" OR "cardiopulmonary bypass" OR "open heart" OR thoracotomy OR sternotomy OR Fontan OR Norwood OR Glenn OR "tetralogy of Fallot" OR "atrial septal defect" OR "ventricular septal defect" OR "transposition of the great arteries" OR "single ventricle" OR "arterial switch" OR "biventricular repair") AND ("chest tube" OR "chest drain*" OR "thoracostomy tube*" OR "thoracic drain*" OR "mediastinal drain*" OR "mediastinal tube*" OR "pleural drain*" OR "pleural tube*" OR "pericardial drain*" OR "pericardial tube*" OR "intercostal drain*" OR "intercostal tube*" OR "underwater seal*" OR "water seal*")

Scopus

Date searched: 20 May 2026. Records retrieved: 76. Field searched: Article title, Abstract, Keywords (default document search). Limits: English language.

("pediatric" OR "paediatric" OR "child" OR "children" OR "infant" OR "neonate" OR "neonatal") AND ("cardiac surger*" OR "heart surger*" OR "congenital heart" OR "cardiopulmonary bypass" OR "open heart" OR thoracotomy OR sternotomy OR Fontan OR Norwood OR Glenn OR "tetralogy of Fallot" OR "atrial septal defect" OR "ventricular septal defect" OR "transposition of the great arteries" OR "single ventricle" OR "arterial switch" OR "biventricular repair") AND ("chest tube" OR "chest drain*" OR

"thoracostomy tube*" OR "thoracic drain*" OR "mediastinal drain*" OR "mediastinal tube*" OR "pleural drain*" OR "pleural tube*" OR "pericardial drain*" OR "pericardial tube*" OR "intercostal drain*" OR "intercostal tube*" OR "underwater seal*" OR "water seal*")

Cochrane Central Register of Controlled Trials (CENTRAL)

Date searched: 20 May 2026. Records retrieved: 31. Field searched: Title, Abstract, Keyword (default search field). Limits: none available; non-English records were excluded at screening.

("pediatric" OR "paediatric" OR "child" OR "children" OR "infant" OR "neonate" OR "neonatal") AND ("cardiac surger*" OR "heart surger*" OR "congenital heart" OR "cardiopulmonary bypass" OR "open heart" OR thoracotomy OR sternotomy OR Fontan OR Norwood OR Glenn OR "tetralogy of Fallot" OR "atrial septal defect" OR "ventricular septal defect" OR "transposition of the great arteries" OR "single ventricle" OR "arterial switch" OR "biventricular repair") AND ("chest tube" OR "chest drain*" OR "thoracostomy tube*" OR "thoracic drain*" OR "mediastinal drain*" OR "mediastinal tube*" OR "pleural drain*" OR "pleural tube*" OR "pericardial drain*" OR "pericardial tube*" OR "intercostal drain*" OR "intercostal tube*" OR "underwater seal*" OR "water seal*")

Web of Science Core Collection

Date searched: 20 May 2026. Records retrieved: 82. Field searched: Topic (default search field). Limits: English language.

("pediatric" OR "paediatric" OR "child" OR "children" OR "infant" OR "neonate" OR "neonatal") AND ("cardiac surger*" OR "heart surger*" OR "congenital heart" OR "cardiopulmonary bypass" OR "open heart" OR thoracotomy OR sternotomy OR Fontan OR Norwood OR Glenn OR "tetralogy of Fallot" OR "atrial septal defect" OR "ventricular septal defect" OR "transposition of the great arteries" OR "single ventricle" OR "arterial switch" OR "biventricular repair") AND ("chest tube" OR "chest drain*" OR "thoracostomy tube*" OR "thoracic drain*" OR "mediastinal drain*" OR "mediastinal tube*" OR "pleural drain*" OR "pleural tube*" OR "pericardial drain*" OR "pericardial tube*" OR "intercostal drain*" OR "intercostal tube*" OR "underwater seal*" OR "water seal*")

Trial registries

ClinicalTrials.gov and the World Health Organization International Clinical Trials Registry Platform (ICTRP) were searched on 18 and 20 May 2026, respectively, using adapted versions of the cardiac surgical and chest-drain concept blocks. Registry records were screened by two reviewers, and none met the eligibility criteria.

ClinicalTrials.gov

Date searched: 18 May 2026. Records retrieved: 17. Interface: advanced search (https://clinicaltrials.gov). Limits: age group child (birth–17 years); first posted on or before 20 May 2026.
Condition/disease: heart OR Cardiac Surgery. Other terms: chest tube OR chest drain OR mediastinal drain OR pleural drain OR thoracostomy tube. Intervention/treatment: chest tube OR chest drain OR mediastinal drain OR pleural drain OR thoracostomy tube.

WHO International Clinical Trials Registry Platform (ICTRP)

Date searched: 20 May 2026. Records retrieved: 8. Interface: advanced search (https://trialsearch.who.int). Limits: date of registration on or before 20 May 2026.

Condition: heart OR cardiac. Intervention: chest tube OR chest drain OR mediastinal drain OR pleural drain OR thoracostomy tube.

Total registry records: 25.