File S1. Completed PRISMA 2020 Checklist

Manuscript: Postoperative chest tube management in paediatric cardiac surgery: a systematic review for nursing practice

Table S1.1. PRISMA 2020 checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Title page
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Abstract; completed checklist in Table S1.2 below
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Section 1, paragraphs 1–7
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Section 1, final paragraph
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Section 2.2
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Section 2.3; dates for each database and trial registry in File S2
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	File S2 (complete strategy for each database and trial registry as run, with date of search and records retrieved); summarised in Section 2.3
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Section 2.4
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Section 2.4. Study authors were not contacted; all data were taken from the published reports.
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Section 2.2 (Outcomes); Section 2.4
Data items	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Section 2.4
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and	Section 2.5

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		if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Section 2.6
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Section 2.2 (eligibility for the comparative and the descriptive synthesis) and Section 2.6
Synthesis methods	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Sections 2.4 and 2.6
Synthesis methods	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Section 2.6; Tables 1–3; Figures 2 and 3
Synthesis methods	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Section 2.6. Meta-analysis was not performed; the rationale and the SWiM-based approach are stated there.
Synthesis methods	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Section 2.6; prespecified neonatal subgroup comparison reported in Section 3.7
Synthesis methods	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Section 2.6. No sensitivity analyses were conducted because no outcomes were pooled.
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Section 2.7
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Section 2.7
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Section 3.1; Figure 1 (PRISMA 2020 template, with database, trial-registry and citation-searching records shown)
Study selection	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Section 3.1. Numbers excluded at full text are reported with reasons by category; individual excluded reports are not cited.
Study characteristics	17	Cite each included study and present its characteristics.	Section 3.2; Tables 1 and 2
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Section 3.3; Figures 2 and 3. The cohort synthesised descriptively was not assessed with ROBINS-I (Section 2.2)
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Sections 3.4–3.7; Tables 1 and 2
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Sections 3.2 and 3.3; restated by outcome in Sections 3.4–3.7
Results of syntheses	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the	Sections 3.4–3.7; Tables 1 and 2. No meta-

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		summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	analysis was performed; study-level estimates are presented without a pooled estimate.
Results of syntheses	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Section 3.7. The prespecified neonatal subgroup comparison could not be conducted; reasons are given there and in Section 4.4.
Results of syntheses	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Not applicable. No sensitivity analyses were conducted (Section 2.6).
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Section 3.8. Publication bias could not be formally assessed because fewer than 10 studies contributed to any outcome.
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Section 3.8; Table 3
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Sections 4.1 and 4.2
Discussion	23b	Discuss any limitations of the evidence included in the review.	Section 4.4
Discussion	23c	Discuss any limitations of the review processes used.	Section 4.4
Discussion	23d	Discuss implications of the results for practice, policy, and future research.	Sections 4.1–4.4; Section 5
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Section 2.1 (PROSPERO CRD420261397281)
Registration and protocol	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Section 2.1. The protocol is available through the PROSPERO record.
Registration and protocol	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Section 2.1, which lists each departure from the registered protocol.
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Funding statement
Competing interests	26	Declare any competing interests of review authors.	Conflicts of Interest statement
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Data Availability Statement

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Table S1.2. PRISMA 2020 for Abstracts checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Title
BACKGROUND			
Objectives	2	Provide an explicit statement of the main objective(s) or question(s) the review addresses.	Abstract, Background/Objectives
METHODS			
Eligibility criteria	3	Specify the inclusion and exclusion criteria for the review.	Abstract, Methods
Information sources	4	Specify the information sources (e.g. databases, registers) used to identify studies and the date when each was last searched.	Abstract, Methods
Risk of bias	5	Specify the methods used to assess risk of bias in the included studies.	Abstract, Methods
Synthesis of results	6	Specify the methods used to present and synthesise results.	Abstract, Methods
RESULTS			
Included studies	7	Give the total number of included studies and participants and summarise relevant characteristics of studies.	Abstract, Results
Synthesis of results	8	Present results for main outcomes, preferably indicating the number of included studies and participants for each. If meta-analysis was done, report the summary estimate and confidence/credible interval. If comparing groups, indicate the direction of the effect (i.e. which group is favoured).	Abstract, Results
DISCUSSION			
Limitations of evidence	9	Provide a brief summary of the limitations of the evidence included in the review (e.g. study risk of bias, inconsistency and imprecision).	Abstract, Results (imprecision and GRADE certainty) and Conclusions
Interpretation	10	Provide a general interpretation of the results and important implications.	Abstract, Conclusions
OTHER			
Funding	11	Specify the primary source of funding for the review.	Abstract, Methods
Registration	12	Provide the register name and registration number.	Abstract, Methods (PROSPERO CRD420261397281)

Source: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;372:n71. doi:10.1136/bmj.n71. The checklist is reproduced under the terms of the Creative Commons Attribution licence.

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