

INPLASY

Recurrence Rate After Postoperative Electron Beam Radiotherapy in Keloid at High Tension Sites: A Meta-Analysis

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Jin, SL¹; Qi, GZ²; Wen, WX³; Yan, CZ⁴.

Corresponding author:

Jin Sheng Lin

lin17805936455@163.com

Author Affiliation:

Dermatology Hospital of Fuzhou.

ADMINISTRATIVE INFORMATION

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Review Stage at time of this submission - Formal screening of search results against eligibility criteria.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 November 2023 and was last updated on 27 November 2023.

INTRODUCTION

Review question / Objective This article aimed to evaluate the true recurrence rate of keloids at high-tension sites after electron beam radiotherapy through a systematic review and meta-analysis of relevant studies.

Condition being studied Keloids at high-tension sites are difficult to treat, which may be related to the mechanical forces that promote fibrosis and collagen deposition. Surgery combined with electron-beam irradiation is an effective therapy for keloids. However, no meta-analysis supports this combination therapy as being effective for keloids at high-tension sites..

METHODS

Participant or population Keloids at high-tension locations (chest, back, and shoulder) after postoperative electron beam radiotherapy.

Intervention Electron beam radiotherapy.

Comparator No control group.

Study designs to be included Publication search, Inclusion and exclusion criteria, Data extraction, Statistical analysis.

Eligibility criteria The included samples all met the diagnosis of keloids.

Information sources PubMed, Embase, Web of Science, and Cochrane databases.

Main outcome(s) The primary outcome variable was the keloid recurrence rate at high-tension locations. Relapse was defined as the percentage of patients who developed keloid recurrence after RT. Meanwhile, the type, rate, and radiation dose of complications were collected.

Quality assessment / Risk of bias analysis The included studies were assessed using the Methodological Index for Non-Randomized Studies (MINORS).

Strategy of data synthesis Meta-analysis will use STATA version 12.0 and conduct one arm of binomial meta-analysis and used I² test to evaluate heterogeneity between studies.

Subgroup analysis The radiotherapy type, rate, and radiation dose of complications were collected.

Sensitivity analysis Meta-analysis fixed effects estimates.

Country(ies) involved China.

Keywords keloid, electron beam radiotherapy, high-tension, surgery.

Contributions of each author

Author 1 - Jin sheng Lin.

Email: lin17805936455@163.com

Author 2 - Qi guo Zhang.

Author 3 - Wen wen Xia.

Author 4 - Yan chen Zhou.