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| review title and basic details |  |
| Review title | **Peroneus longus tendon with or without peroneus brevis tenodesis for primary anterior cruciate ligament reconstruction surgery:** **A systematic review and meta-analysis**. |
| Original language title | English |
| Review objectives | The objective of the study is to find and synthesize evidence from all available literature in order to evaluate:knee function outcome measures to determine whether the peroneus longus tendon autograft is a viable alternative option for ACLR,ankle function outcome measures to determine the risk of donor-site morbidity, andvariations in graft harvesting techniques (with or without distal attachment to peroneus longus brevis tendon) to determine optimal surgical technique. |
| Keywords |  |
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| searching and screening |  |
| Searches | Databases (PubMed/MEDLINE, Embase, Web of Science, Scopus)  Registers (Cochrane Library)  Citation/reference back-searching |
| Study design | Systematic review and meta-analysis of randomized clinical trials, prospective cohort studies, retrospective cohort studies, case-control studies, and case series.  Level of evidence (IV) |
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| eligibility criteria |  |
| Condition or domain being studied | Knee and ankle outcome measures after primary anterior cruciate ligament reconstruction surgery using peroneus longus tendon autograft. |
| Population | Skeletally-mature adult patients defined as ≥ 18 years old. |
| Intervention(s) or exposure(s) | Peroneus longus tendon (PLT) graft harvest with or without distal attachment to peroneus brevis tendon (PLBT). |
| Comparator(s) or control(s) | Covariates include mean follow-up duration (months), gender (male, female), and age (years). |
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| outcomes to be analysed |  |
| Main outcomes | |  |  | | --- | --- | | **Knee functional outcomes** | **Ankle donor-site morbidity outcomes** | | IKDC, Lysholm | AOFAS, FADI | |
| Additional outcomes |  |
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| data collection process |  |
| Data extraction (selection and coding) |  |
| Risk of bias (quality) assessment | Quality assessment will be performed using the MINORS Criteria and risk of bias with Cochrane's RoB2 tool. |
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| planned data synthesis |  |
| Strategy for data synthesis | Continuous (e.g., mean, median) and dichotomous (e.g., proportions) will be undergo standard meta-analytic standardization and abstraction.  The effect sizes of all studies will be synthesized into pooled estimates using meta-analysis of random effects into pooled means and prevalences. |
| Analysis of subgroups or subsets | Subgroup analysis between PLT and PLBT will be performed to compare the effects of distal attachment during graft harvesting.  Meta-regression analysis will be performed to control for the covariates (follow-up duration, mean age of participants, and gender) to determine whether the results are better explained by other predictors than variation in graft harvesting technique. |
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| review affiliation, funding and peer review |  |
| Review team members | Dong Woon Kim, MD  Shayden Bernas  Konrad Malinowski, MD, PhD |
| Review affiliation |  |
| Funding source |  |
| Named contact |  |
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| timeline of the review |  |
| Review timeline | Started: 2025-10-12 |
| Date of first submission to PROSPERO |  |
| Date of registration in PROSPERO |  |
|  |  |
| current review stage |  |
| Publication of review results |  |
| Stage of the review at this submission | |  |  |  | | --- | --- | --- | | **Review stage** | **Started** | **Completed** | | Screening search results against inclusion criteria |  |  | | Data synthesis |  |  | | Pilot work |  |  | | Data extraction or receipt of IP |  |  | | Formal searching/study identification |  |  | | Risk of bias/quality assessment |  |  | |
| Review status |  |
|  |  |
| additional information |  |
| Review conflict of interest | None. |
| Country | Poland |

**PROSPERO protocol template**