**Objective:** To investigate the efficacy and safety of the different techniques of biologic reconstruction following GCTs total resection. And present novel technique study evaluated the functional outcomes in ten patients who underwent this reconstruction technique after en bloc resection of GCT of the distal radius.

**Methods:** A systematic review and meta-analysis of biological reconstruction after en-bloc resection of giant cell tumors at the distal radius was conducted concerning the reported functional outcomes, including grip strength, range of forearm motion, functional scores, and new bone formation, as well as postoperative complications, such as delayed union, local recurrence and metastasis. And composed of 10 patients (5 men and 5 women) who were treated in our unit for Campanacci grade III giant cell tumour of the distal radius. Following en bloc resection of a giant cell tumour of the distal radius, the wrist was reconstructed by transposing a vascularised pedicle graft from the ipsilateral ulnar shaft.

**Results:** En bloc resection with wrist reconstruction is effective for local control of GCTs of the distal radius and restoration of wrist functionality. Reconstruction surgeries, including arthroplasty, osteoarticular allografts, allograft arthrodesis, and vascularized or nonvascular fibular autografts with or without arthrodesis are recommended after large resection of the distal radius. Prostheses are not appropriate for long-term use because of incompatibility between the prosthesis and the host bone. The bone union is the most effective way to ensure the long-term survival of prostheses. Bone grafts remain the first choice in the treatment of distal radius lesions secondary to resection of recurrent GCT. For case series, all patients had a good range of pronation and supination, but flexion and extension of the wrist was limited. DASH scores ranged from 5–11.

**Conclusion:** Ulnar translocation following GCT en bloc resection warrants additional investigation in large cohorts and well-designed studies to corroborate the promising outcomes presented in this review. This reconstruction method is a safe and effective procedure that provides good aesthetic outcomes, removes the need for microvascular techniques, and reduces donor site morbidity.



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## MEASURE OF HEALTH-RELATED QUALITY OF LIFE IN INTERVENTIONAL STUDIES AIMING AT THE MANAGEMENT OF SARCOPENIA: RESULTS FROM A SYSTEMATIC LITERATURE REVIEW

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**Objective:** Currently, there is a rapid development of therapeutic strategies aiming at the management of sarcopenia. So far, mixed exercise and physical activity with nutritional supplementation have

been shown to be the most effective sarcopenia interventions to increase muscle mass or muscle strength of participants. However, complete assessment of the benefits of a therapeutic intervention should also provide evidence of an impact on patients' health-related quality of life (HRQoL). The purpose of this systematic literature review is to summarize the effects of sarcopenia-designed interventions on the HRQoL of sarcopenic participants.

**Methods:** The electronic databases MEDLINE, Scopus, Allied and Complementary Medicine (AMED), EMB Review—ACP Journal Club, EBM Review-Cochrane Central of Register of Controlled Trials and APA PsychInfo were searched up to October 2022 interventional studies aiming at the management of sarcopenia reporting a HRQoL assessment. Study selection and data extraction were carried out by two independent researchers. Quality of individual studies was measured using the Cochrane Risk of Bias 2.0 tool. PRISMA guidelines were followed.

Results: From 3,725 potential studies, eight randomized controlled trials were identified as reporting HRQoL data for sarcopenic participants. The interventions proposed within those eight studies were heterogeneous; nutritional supplement (n = 3), exercise intervention (n = 2), combined exercise and nutrition (n = 1) and pharmacological drugs (n = 25). Sample sizes varied between 54 and 380 participants and time of interventions between 12 weeks and one year. None of the studies identified HRQoL as the primary outcome. Only one study used a specific HRQoL questionnaire (i.e. the SarQoL), whereas the other studies used the SF-12, SF-36 and EQ5D generic questionnaires. Even if most of those studies-at the exception of the two studies using an intervention with pharmacological therapiesshowed an improvement of sarcopenia biomarkers, results in terms of HRQoL improvements were less convergent. Only three out of the eight interventional studies (37.5%) highlighted an improvement of HRQoL following the proposed interventions including the one using the specific SarQoL. No study presented a high risk of bias in any of the five domains of the RoB 2.0 tool.

**Conclusion:** So far, a restricted number of interventional studies aiming at the management of sarcopenia provided a measurement of HRQoL as an outcome. Even if most of the proposed interventions tends to be beneficial to improve muscle parameters of patients, HRQoL improvement remain scarce. One of the explanation hypothesis could be that almost all of the included studies used a generic tool to assess HRQoL of participants. Specific instruments are more sensitive to change and therefore more appropriate to be used in interventional studies. One unique study used the specific SarQoL questionnaire and actually reported an improvement of HRQoL following the intervention.

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## RELATIONSHIP BETWEEN DIETARY INTAKE OF ZINC, B-CAROTENE, VITAMIN C AND VEGETABLES AND BONE MINERAL DENSITY IN POSTMENOPAUSAL INDIAN FEMALE POPULATION

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**Objective:** The prevalence of osteoporosis increases after menopause, with the reduction in oestrogen secretion in postmenopausal women resulting in decreased bone density that can lead to osteoporosis. Adequate nutrient intake is important for the prevention of osteoporosis in postmenopausal women. The study aim was to examine the relationship between nutritional intake and BMD in the postmenopausal Indian female population.

**Methods:** Dietary intake was recorded in postmenopausal Indian women using a semiquantitative questionnaire. The frequency of consumption of various food groups and nutrient intake were