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# GEOMETRIC COMPENSATION TECHNIQUE FOR CONSERVATIVE TREATMENT OF BREAST CANCER: A SYSTEMATIC REVIEW

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**Objective:** A systematic review was carried out using PRISMA methodology to evaluate indications, patient selection, surgery, and results associated with geometric compensation technique (GCT). **Methods:** Approved by Ethics Committee 1594/2018. A search was conducted for publications addressing patients with breast cancer undergoing extreme oncoplasty (EO) and/or reports of cases of patients with breast cancer undergoing GCT, split reduction technique (SRT), or techniques with same principles to evaluate indications and recent developments in literature. The research was carried out until October 12, 2020 in eight medical databases. The descriptors searched for in title/abstract were: (“Breast Neoplasm” AND “Mastectomy Segmental”) AND (Mammoplasty OR “Geometric Compensation” OR “Split Reduction” OR “Extreme Oncoplasty”). **Results:** In the systematic review, 3,584 articles were evaluated, 19 articles were selected, 243 patients undergoing GCT were found. Of the 19 articles, 6 need mention. The indication ranged from tumors close to skin in upper and outer quadrants to all quadrants and large (>5 cm) multifocal tumors, favoring breast conserving surgery instead of mastectomy, with high rates of free margins, low recurrence, and good aesthetic outcomes. **Conclusions:** GCT is an oncologically safe and aesthetically satisfactory option for the surgical removal of large tumors in breast or in unfavorable resection sites, which is the initial candidate for mastectomy. Regardless of the name used for its diffusion, split reduction, or geometric compensation, it is a really good surgical technique. It is important to organize literature because dissemination of GCT can benefit many women, otherwise it would be restricted to some surgeons.

**Keywords:** Breast Neoplasms; Segmental Mastectomy; Plastic Surgery; Mammoplasty; Conservative Treatment.