Oncoplastic surgery as adjuvant treatment in the management of patients with tuberculosis granulomatous mastitis

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BACKGROUND

Chronic granulomatous tuberculosis mastitis (CGTBM), first described by Sir Astley Cooper in 1829, is an extrapulmonary form of tuberculosis (TB) (1, 2). CGTBM is a rare disease that accounts for less than 1% of all cases of tuberculosis.

The treatment of choice for CGTBM cases is the pharmacological scheme for extrapulmonary tuberculosis, with surgical treatment reserved as adjuvant therapy for those failing to TB drugs and with relapses. Surgical standard treatment includes draining the abscess, wounds’ debridement, closing ulcerations and removing materials such as breast implants and the granulomas itself (3).

In our experience, the standard surgical treatment for CGTBM often produces unaesthetic outcomes, with unnecessary mammary glands removal and high rates of discomfort among patients.

Oncoplastic surgery indication should vary based on the size of the tumor, its location and the size of the patient’s breast (4), but certainly can benefit most patients MG/TB with avoiding anesthetics and deforming surgeries.

OBJECTIVE

To evaluate the efficacy and safety of oncoplastic surgery as adjuvant treatment to pharmacological treatment in patients with chronic granulomatous tuberculosis mastitis.

METHODS

We use a retrospective cohort study design and assess every case of CGTBM treated during the 2005-2017 period at the Grau Hospital, which is one of the leading hospitals treating CGTBM patients at the social security system ESSALUD in Peru, excluding only cases that also tested for inflammatory carcinoma or were breastfeeding at the time of surgery.

During the study period we treat CGTBM patients using standard nine-months extrapulmonary TB treatment, and for those eligible also oncoplastic surgery since 2010.

To compare both treatment outcomes, we use as study outcomes their recurrence rates, corticosteroids use, and safety (defined as any wound, bleeding or wound complication) during the first two years of follow up since starting the nine months standard anti TB drug therapy for extrapulmonary TB.

RESULTS

We analyzed a total of 116 cases of CGTBM. Patients’ age ranged from 19 to 80 years old, and most of them were female (99%), natural from Lima (79%), tested negative to PPD (91%) and have a negative history of pulmonary TB (99%).

Most patients belong to the cohort of patients treated with standard drug therapy for extrapulmonary TB plus oncoplastic surgery (58%), while the rest belong to the cohort treated with standard drug therapy for extrapulmonary TB treatment alone.

The most frequent oncoplastic surgical patterns were lateral (49%) and horizontal (27%). During the follow-up we did not found difference between both cohorts neither in terms of recurrence rate (0% vs 2%; p-value = 0.2402) or corticosteroids use rate (0% vs 2%; p-value = 0.2402).

We did not report any severe adverse event in both arms of the study.

CONCLUSIONS

Oncoplastic surgery plus extrapulmonary TB treatment seems as effective and safe as the extrapulmonary TB treatment alone. However, a necessary randomized controlled clinical trial will be needed to support this observation.

REFERENCES