



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## **INTRALESIONAL BCG IMMUNOTHERAPY IN RECALCITRANT MULTIPLE VERRUCAE VULGARIS: AN OPEN LABEL UNCONTROLLED STUDY.**

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**Introduction:** Multiple cutaneous warts present a therapeutic challenge because of recurrence and may become a frustrating disease for both physician and patients. Recently intralesional antigen immunotherapy for recurrent multiple warts is on the rising trend not only because of its encouraging results but also due to its ability to cure distant warts and preventing recurrence.

**Objective:** To evaluate the safety and efficacy of intralesional immunotherapy with Bacillus Calmette Guerin (BCG) vaccine in the treatment of multiple recurrent and recalcitrant verrucae.

**Material & Methods:** Sixty adult patients with multiple recurrent extragenital warts of different sizes, duration and numbers, with or without distant warts were enrolled in the study. Without a pre-sensitization skin test, 0.1ml BCG vaccine was injected intralesionally in the largest wart at 3-weekly interval, till complete clearance or for a maximum of three sessions. To detect any recurrence, follow-up of patients was done every month for three months.

**Results:** Out of 60 patients enrolled in the study, 52 patients completed the treatment protocol of three injections and 3 months of follow up and 8 patients discontinued for various reasons. Complete clearance of the lesions was achieved in 73.07% (38) patients, partial clearance in 21.15% (11) patients, and no response in 5.76% (3) patient. Out of those with distant warts, complete response was demonstrated in 75% patients. Immunotherapy associated side effects were mild in the form of flu-like symptoms, pain, erythema and itching at the injection site. Recurrence of lesions was seen only in 1 patient in 3 months follow up period.

**Conclusions:** Intralesional BCG immunotherapy is a safe, effective, and promising treatment modality for recurrent multiple warts.

