INTRODUCTION: Replantation using microsurgical techniques is a fairly new procedure in Vietnam. We reviewed and evaluated our 7-year results of thumb replantation in Vietnamese patients following traumatic thumb amputation.

MATERIAL AND METHODS: Traumatic thumb amputations between September 1999 and July 2006 were reexamined and evaluated. Postoperative functional results were evaluated based on four main criteria: 1) the patient's subjective attitude regarding the replanted thumb, 2) the degree of mobility of the replanted thumb compared with its counterpart, 3) the level of sensitivity of the replanted thumb, and 4) the objective ability to perform daily tasks.

RESULTS: A total of 26 patients were documented. The duration of follow-up averaged 22 months (range 6-72 months). The success rate of replantation was 81%. A rating of either "good" or "very good" was obtained for 81% of the replanted thumbs.

DISCUSSION: Vascular thrombosis was the cause of all failures. Proper debridement, standardized microvascular techniques, timely detection of thrombosis formation, and reoperation using vein grafts play a decisive role in the final success.