INTRODUCTION

Syndactyly is one of the more common congenital malformations of the limbs. It can occur as part of a syndrome or as a sporadic event.1,2 Despite the long history of surgical treatment in syndactyly repair, further surgical techniques minimize but not completely overcome all postoperative complications. The most severe but rare complication of the surgical treatment is ischemia of the fingers.3 We present a case of syndactyly with postoperative ischemia complication that the suspected reason is overlooked Raynaud’s disease.

CASE REPORT

A 19-year-old male admitted to our clinic for the treatment of syndactyly which was on the 3rd web space of his left hand. X-rays demonstrated no bony union so the condition was diagnosed as complete simple syndactyly. The patient mentioned no significant point about his personal and family medical history.

The surgical division of the fingers was accomplished by Z-plasty incisions. Web space was reconstructed with a dorsal skin flap and interdigitating skin flaps were used for resurfacing other defects. Full-thickness skin grafts which were harvested from hairless skin of the upper arm were applied to the areas that remain. These grafts helped to avoid tight skin closure. No degreasing was performed for not to damage the blood circulation of the fingers. Neurovascular pedicles were seen and protected under loupe magnification (2.5x). Meticulous dissection and hemostasis was applied under tourniquet. A loose-molded dressing and short arm plaster splint was applied after surgery.

The patient was discharged from the hospital the day after the surgery. There was no evidence of circulation problem at that time. Patient applied with the complaint of an increasing pain at postoperative 2nd day. Loss of capillary circulation was observed. All the dressings were removed. Some of the stitches were taken out. Intravenous administration of low molecular dextran and pentoxifylline was continued to reorganize circulation for three days (Figure 1). The patient was followed up closely for four weeks with non-adhesive dressing. No other surgical intervention was applied except minor debridement for superficial sloughing. Minor skin loss was healed by secondary intention. Short arm splint is kept in place for 2 weeks and continued as a night splint for 2 months to prevent contractures (Figure 2). By the help of this complication, the patient re-
avoided if not necessary. All these precautions were put into practice in the operation of our case.

Obtaining a thorough personal and family medical history is necessary to diagnose hypercoagulability and vasospastic conditions. The patient with Raynaud’s disease may have rare attacks that he can forget to talk about the condition during the initial examination as our patient has done. Vascular and hematological disorders have to be asked insistently before the surgery.

Raynaud’s disease is a rare vasospastic disorder of the blood vessels, usually in the fingers and toes. Ischemic attacks may cause distal or total finger necrosis in severe cases. Cold weather, stress and some medicines can trigger attacks.8,9 Despite it hasn’t been mentioned in the literature before, hand surgery may also trigger the attack via operational stress or additional vasospasm as we were confronted with in our case. Also the possibility of overlap ischemic effect of the disease and hand surgery has to be kept in mind. The patient has to be informed about the probable increased ischemia complication rates.

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REFERENCES