

BUDDY SPLINT IS “BUDDY” YET NOT SO FRIENDLY: A CASE REPORT

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Introduction: Buddy splint is a known method for treating injuries involving fingers and toes. It's applied by using a healthy digit that would acts as a splint, keeping the injured digit immobilized for healing. We report a case of proximal phalange and middle phalange fracture involving right third toe which was manage by buddy splint however complicated with vascular insufficiency.

Discussion: A 9-year-old boy allegedly injured while playing football barefooted in school and sustained closed fracture middle and proximal phalanges of right 3rd toe. Upon assessment, 3rd toe was swollen and deformed, skin condition and circulation were not compromised. He was then treated with Buddy Splint. Check X-ray showed acceptable alignment and was discharged with next clinic visit a week later. After a week, his 3rd toe was dusky, with blister formation. The toe showed capillary refill time of 2 seconds with oxygen saturation of 90 %. He was admitted for observation and managed by antibiotics and angle poise lamp. Blisters surrounding the toe was aspirated and buddy splint removed. After a week of monitoring, 3rd toe circulation and saturation improved prior to discharge. At 3rd month of follow up, toe showed normal circulation, fracture site was non tender with normal gait, fracture angulation was 15 degrees in anterior posterior view. Patient parent's education regarding risk and complication of a procedure is a key parameter in managing any fractures. A simple application of buddy splint must not be taken for granted as it may lead to vascular compromise and amputation. WonSH et al. reported that low patients' compliance and skin injuries were common complications of buddy splint. Some surgeons recommended that applying gauzes in between 2 digits to reduce risk of skin injury.

Conclusion: Buddy splints can lead to vascular compromise if its not anticipated or mismanaged thus being potential medical legal case.