Case Report Of Gollop-Wolfgang Complex: Surgery, Boulevard To Rejuvenate Functionality

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INTRODUCTION:

Gollop-Wolfgang Complex(GWC) is a condition of bifid femur with tibia agenesis with or without hand ectrodactyly. GWC is rare and was listed by the United States Office of rare disease(ORD) of the National Institute of Health(NIH). Incidence was reported 1: 1 000 000 live births. GWC is usually accompanied by other congenital anomalies of other parts of the body. There are variant of anomalies of lower limb in GWC which caused poor life functionality and definite solution is reconstruction surgery.

CASE REPORT:

We are reporting a case of 10 years old boy born at term from non-consanguineous family by caesarean. He ambulated with wheelchair for the past 10 years and did not seek any expertise. On examination patient has bilateral shortened tibia with bilateral club foot and presence of bony swelling over distal medial left thigh (figure 1). Plain radiograph (figure 2) showed bifid left femur with short bilateral tibia and absence of bilateral patella. He underwent Computed Tomography Angiography of bilateral lower limb for vascular mapping preoperatively. Later, he underwent bilateral through knee amputation, excision of femoral branch, corrective osteotomy and plating of left femur. Postoperatively, he was referred to rehabilitation physician for prosthesis.

DISCUSSIONS:

Among patient who experienced reconstructive surgery, walking is possible with suitable prosthesis so as to improve the quality of life despite some acceptance issues by the patient and family. Early knee disarticulation and bifid femur resection is the best treatment, however limb salvage surgeries are still an option.

Figure 1 :bilateral lower limb deformity

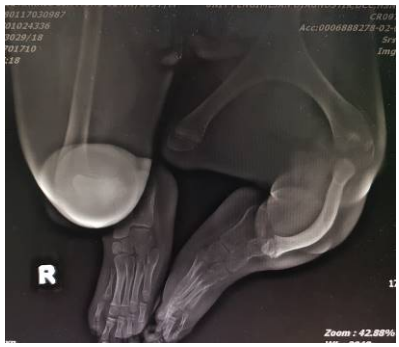
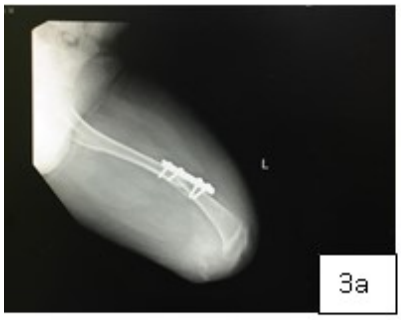


Figure 2



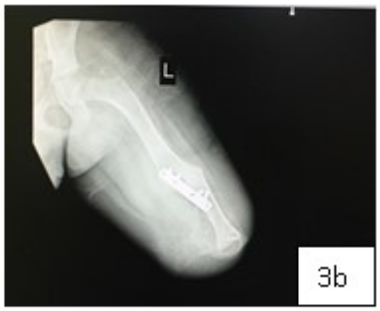


Figure 3(a) and 3(b) are post-operative plain radiograph of femur after reconstructive surgery

CONCLUSION:

The prognosis is good with reconstructive surgery as compared to poor functional outcome without one. Therefore surgery is crucial to regenerate functionality of GWC patient.

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