

# Bifocal Lengthening Ilizarov In Chronic Osteomyelitis Right Tibia Fracture, A Case Report

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## INTRODUCTION

Tibial osteomyelitis in association with bone and soft tissue infection poses as significant reconstructive challenge. This is a case report of extreme lengthening of tibia of about 11cm using bone transport technique.

## CASE REPORT

This is 32 years old man with no known medical illness, brought to casualty to emergency department post motor vehicle accident in December 2017 sustained open segmental fracture right tibia and fibula (Gustillo 3A). Initial debridement and uniplanar external fix done over right leg. External fixation kept for 2 months for wound healing and underwent multiple wound debridement over right leg for non-healing wound over right leg.

MRI done on September 2018, showed chronic osteomyelitis over right tibia measuring ~ 11cm.

In November 2018, underwent bone resection over right tibia and ilizarov limb lengthening system with 2 transporters (2 mobile fragments) at proximal part. No fragment from distal part as not enough bone from distal tibia. Both transporters attach to 2 different rings and will act as tandem for transportation.

After 10 days, ring started to be turned and lengthening started.

On day 22 post turning, total of 39mm length transported.



## DISCUSSION

The use of bone transport technique by application of ilizarov ring fixator has been proved to be minimally invasive and reliable method in managing massive bone defect. Accurate application of the ilizarov frame and proper transport of both transporters are important factors alleviating the risk for deviation of transported segment.

Major complications like pin tract infection, frame failure, premature consolidation have to be put on an eye.

However, due to the need for regular follow-ups and monitoring, it demands high compliance from the patient to achieve optimal results.

## CONCLUSION

The use of bone transport technique using bifocal ilizarov external rings has proved to be a reliable method in managing massive bone defect.

## REFERENCES

1. [www.mjdrdypu.org/article/Senc,eal](http://www.mjdrdypu.org/article/Senc,eal)  
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