

# Negative Pressure Wound Therapy in Fingertip Replantation

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## Introduction

### •Fingertip replantation

- Artery anastomosis
- Neurotomy
- Venous Anastomosis

### (Volar vein, Dorsal vein)

•If vein wasn't available, we do artery Anastomosis Only

### •Negative pressure wound Therapy

- Relieve Venous Congestion
- Change Micro-environment and Improved Granulation
- Enhance Wound Healing
- Neo-vascularization

### •Purpose of the study

- Using Negative pressure wound therapy as an alternative salvage method in Fingertip replantation without vein anastomosis

## Methods

- Retrospective review of 20 cases (24 digits)
- Types of Traumatic Fingertip injuries : Complete and Near Complete Amputation
- Fingers replantation : 10 Thumbs , 14 other fingers
- Apply Negative pressure wound therapy in all cases
- Reviewed:
  - Survival of fingertip replantation
  - Necessity of Blood transfusion

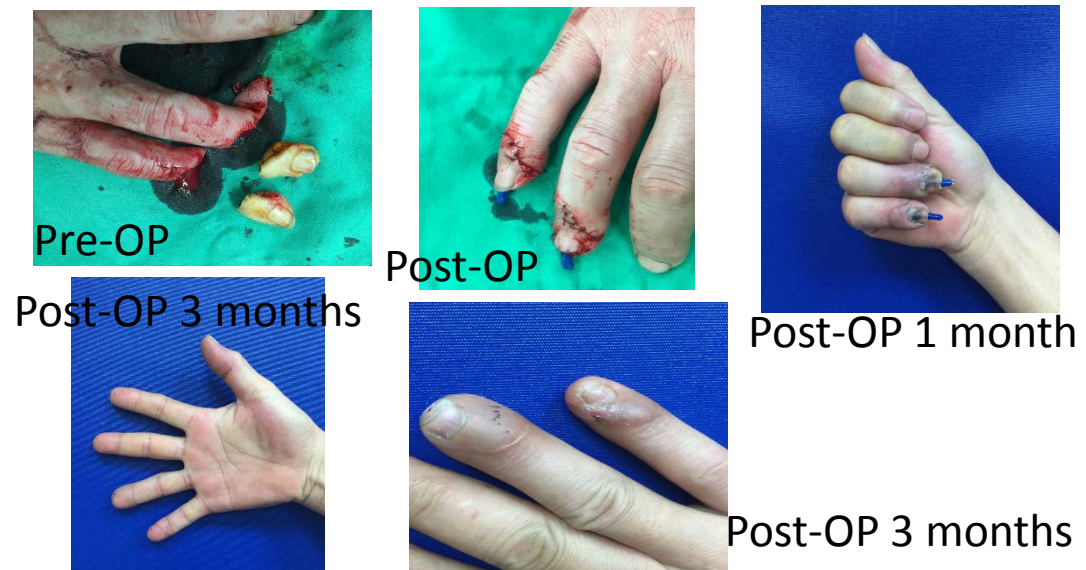
Figure 1 – Negative pressure wound therapy in CGMH



## Case 1 : 26 y/o Male , Traumatic complete amputated left thumb



## Case 2 : 55 y/o Male , Traumatic complete amputated Right ring and little



## Results

- 18 males ( 90% ) , 2 females ( 10% )
- Age : around 19~55 year-old
- Replantation : 10 Thumbs , 14 other fingers
- Failure cases : 2 thumbs
- Overall successful rate : 91.67%
- No Blood Transfusion in all cases

## Conclusions

- No necessity of blood transfusion in the patient with Negative Pressure Wound Therapy
- NPWT is an alternative salvage way in replantation without vein anastomosis