

Mandible Reconstruction Using Free Fibula Flap

Since 1983, the free fibula flap gains the domains each after the other. The side effects of its harvest in site donor are well tolerated. Whereas the benefits of its implantation in site recipient are of great value.

Previously, in three reported cases, I presented some examples of its valuable contributions in plastic surgery; the maxilla, the radius bone, and the ulna bone reconstruction.

Herein, I will present another reported case concerning the mandible reconstruction using the same versatile flap. The patient is a 31-year-old female, was a victim of a gun shout. She lost the total nose, the middle portion of the maxilla, and the anterior arc of the mandible. The total left horizontal ramus, the total chin bone, and most of the right horizontal ramus of the mandible were absent; [Figures \(1\)](#), [\(2\)](#), [\(3\)](#), [\(4\)](#), [\(5\)](#), [\(6\)](#), [\(7\)](#).



Figure (1)
Pre- Operative X- Ray

Panoramic dental X-ray reveals the bone defects in the nose, the maxilla, and the mandible.
In the mandible, the total left horizontal ramus, chin bone,
and most of the right horizontal ramus, all are absent.



Figure (2)
Pre- Operation Face Photo

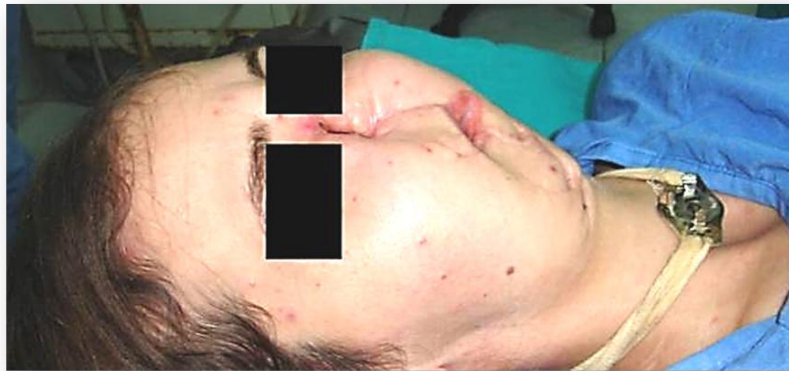


Figure (3)
Pre- Operation Profile

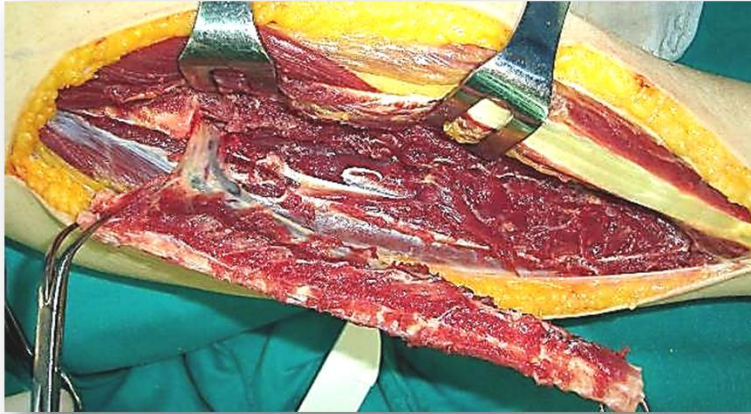


Figure (4)
Per- Operative View,
Vascularized Fibula Flap

Fibula flap is still in place connected to its pedicle

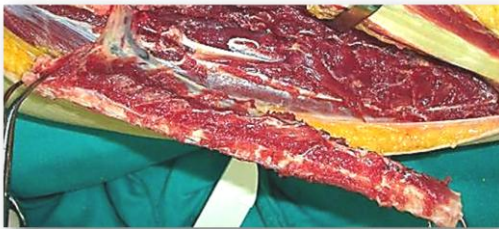


Figure (5- a)

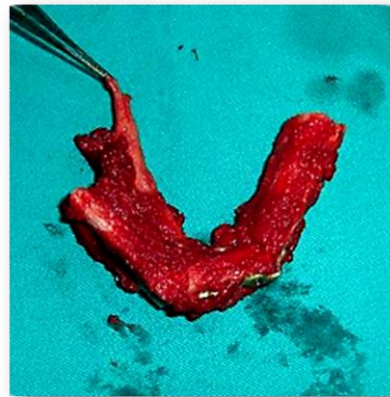


Figure (5- b)

Figure (5)
Per- Operative Views,
Vascularized Fibula Flap

Figure (5- a): The free fibula flap, of 16cm long, is harvested with its vascular pedicle.

Figure (5 -b): The fibula is reformed as a horse-shoe like in order to replace the mandible bone lost.
 The forceps indicates to the vascular pedicle.

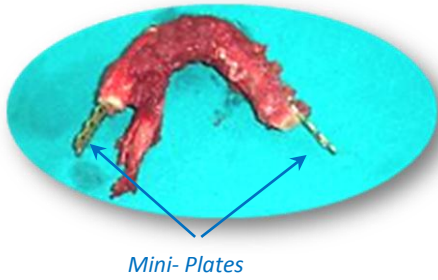


Figure (6- a)

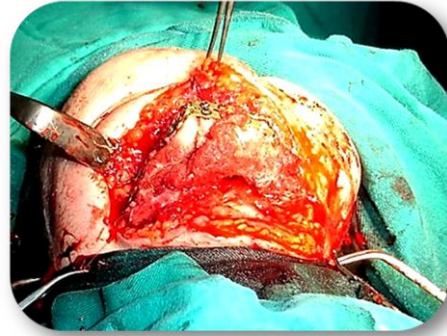


Figure (6- b)

Figure (6)
Per- Operative Views,
Vascularized Fibula Flap

Figure (6- a): The fibula flap is reformed as a horse-shoe like in order to replace the bone defect in mandible.

Figure (6- b): The reformed free fibula flap in its final place. The vascular pedicle of the flap is anastomosed to the right facial pedicle.



Figure (7- a)
Photo from Below



Figure (7- b)
Profile Photo



















Figure (7)
Per- Operative Views

(*) More reported cases of using the Free Fibula Flap in bone reconstruction on these links
(Personal Archive):












1- Maxilla Reconstruction.






















- 2- [Mandible Reconstruction.](#)
- 3- [Ulna Reconstruction.](#)
- 4- [Tibia reconstruction in case of recalcitrant osteitis \(1\).](#)
- 5- [Tibia Reconstruction \(2\).](#)
- 6- [Radius Reconstruction \(1\).](#)
- 7- [Radius Reconstruction \(2\).](#)






In another context, one can also read:





-  [Neural Conduction, Personal View vs. International View \(Innovated\)](#)
-  [Upper Motor Neuron Lesions, Pathophysiology of Symptomatology](#)
-  [Neural Conduction, Action Pressure Waves \(Innovated\)](#)
-  [Neural Conduction, Action Potentials \(Innovated\)](#)
-  [Neural Conduction, Action Electrical Currents \(Innovated\)](#)
-  [The Function of Action Potentials \(Innovated\)](#)
-  [The Three Phases of Neural Conduction \(Innovated\)](#)
-  [Neural Conduction in the Synapse \(Innovated\)](#)
-  [Sensory Receptors](#)
-  [Nodes of Ranvier, the Equalizers \(Innovated\)](#)
-  [Nodes of Ranvier, the Functions \(Innovated\)](#)
-  [Nodes of Ranvier, First Function \(Innovated\)](#)
-  [Nodes of Ranvier, Second Function \(Innovated\)](#)
-  [Nodes of Ranvier, Third Function \(Innovated\)](#)
-  [Node of Ranvier The Anatomy](#)
-  [The Philosophy of Pain, Pain Comes First! \(Innovated\)](#)
-  [The Philosophy of the Form \(Innovated\)](#)
-  [Spinal Injury, Pathophysiology of Spinal Shock, Pathophysiology of](#)

Hyperreflexia

-  [Who Decides the Sex of Coming Baby?](#)
-  [Spinal Shock \(Innovated\)](#)
-  [The Clonus \(Innovated\)](#)
-  [Hyperactivity Hyperreflexia \(Innovated\)](#)
-  [Hyperreflexia, Extended Sector of Reflex](#)
-  [Hyperreflexia, Bilateral Responses](#)
-  [Hyperreflexia, Multiple Responses](#)
-  [Nerve Conduction Study, Wrong Hypothesis is the Origin of the Misinterpretation \(Innovated\)](#)
-  [Wallerian Degeneration \(Innovated\)](#)
-  [Neural Regeneration \(Innovated\)](#)
-  [Wallerian Degeneration Attacks Motor Axons, While Avoids Sensory Axons](#)
-  [Barr Body, the Whole Story \(Innovated\)](#)
-  [Boy or Girl, Mother Decides!](#)
-  [Adam's Rib and Adam's Apple, Two Faces of one Sin](#)
-  [The Black Hole is a \(the\) Falling Star?](#)
-  [Adam's Rib, could be the Original Sin?](#)
-  [Pronator Teres Syndrome, Struthers Like Ligament \(Innovated\)](#)
-  [Function of Standard Action Potentials & Currents](#)
-  [Posterior Interosseous Nerve Syndrome](#)
-  [Spinal Reflex, New Hypothesis of Physiology](#)
-  [Hyperreflexia, Innovated Pathophysiology](#)

-  [*Clonus, 1st Hypothesis of Pathophysiology*](#)
-  [*Clonus, 2nd Hypothesis of Pathophysiology*](#)
-  [*Clonus, Two Hypotheses of Pathophysiology*](#)
-  [*Hyperreflexia \(1\), Pathophysiology of Hyperactivity*](#)
-  [*Hyperreflexia \(2\), Pathophysiology of bilateral Responses*](#)
-  [*Hyperreflexia \(3\), Pathophysiology of Extended Hyperreflex*](#)
-  [*Hyperreflexia \(4\), Pathophysiology of Multi-Response Hyperreflex*](#)
-  [*Barr Body, the Second Look*](#)
-  [*Mitosis in Animal Cell*](#)
-  [*Meiosis*](#)
-  [*Universe Creation, Hypothesis of Continuous Cosmic Nebula*](#)
-  [*Circulating Sweepers*](#)
-  [*Pneumatic Petrous, Bilateral Temporal Hyperpneumatization*](#)
-  [*Ulnar Nerve, Congenital Bilateral Dislocation*](#)
-  [*Oocytogenesis*](#)
-  [*Spermatogenesis*](#)
-  [*This Woman Can Only Give Birth to Female Children*](#)
-  [*This Woman Can Only Give Birth to Male Children*](#)
-  [*This Woman Can Give Birth to Female Children More Than to Male Children*](#)
-  [*This Woman Can Give Birth to Male Children More Than to Female Children*](#)
-  [*This Woman Can Equally Give Birth to Male Children & to Female Children*](#)

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-  [*Claw Hand Deformity \(Brand Operation\)*](#)
-  [*Corona Virus \(Covid-19\): After Humiliation, Is Targeting Our Genes*](#)
-  [*Barr Body; Mystery of Origin & Ignorance of Function*](#)
-  [*The Multiple Sclerosis: The Causative Relationship Between The Galvanic Current & Multiple Sclerosis?*](#)
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-  [*Cauda Equina Injury, New Surgical Approach*](#)

-  [*Ulnar Dimelia, Mirror hand Deformity*](#)
-  [*Carpal Tunnel Syndrome Complicated by Complete Rupture of Median Nerve*](#)
-  [*Presacral Schwannoma*](#)
-  [*Congenital Bilateral Thenar Hypoplasia*](#)
-  [*Biceps Femoris' Long Head Syndrome \(BFLHS\)*](#)
-  [*Algodystrophy Syndrome Complicated by Constricting Ring at the Proximal Border of the Edema*](#)
-  [*Mandible Reconstruction Using Free Fibula Flap*](#)

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