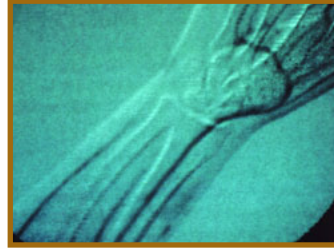


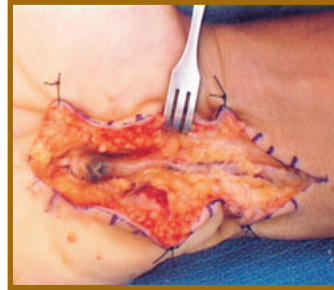
Hypothenar Hammer Syndrome

Our hands are more delicate and susceptible to injury than most realize. Tendons, nerves, and blood vessels lie just millimeters beneath the skin but offer no protection against sharp objects or severe impact.

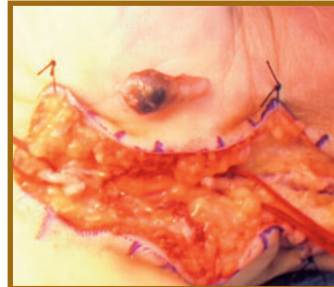
Hypothenar Hammer Syndrome develops from using the "base" of the hand as a hammer. Often mechanics (pounding hubcaps or auto parts) or machinists are prone to this type of injury. The hand is not intended to be used for a hammer. The repeated pounding weakens the wall of the ulnar artery which balloons out forming an aneurysm. Blood clots in this enlarged, damaged segment block the flow of blood depriving the fingers of blood and putting pressure on the ulnar artery in Guyon's canal. This causes tingling in the fingers, mottling or purple discoloration. The tips of the fingers may begin to die and untreated, the fingers will be lost. The condition may be extremely painful.



Arteriogram showing absence of ulnar artery blood flow



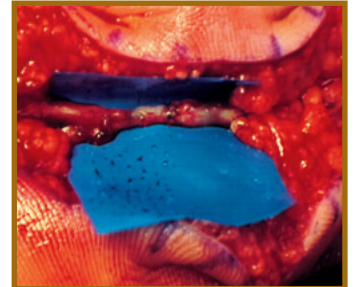
Ulmar artery aneurysm, thrombosed



Resected aneurysm

Treatment is straightforward. The blood clot is removed from the artery and its branches, and the damaged segment of artery is removed. The artery is repaired (sometimes using a vein interposition graft), utilizing microsurgical techniques.

After surgery, it is absolutely essential to completely avoid nicotine in any form (including patches), caffeine and cold for several weeks. Typically the patient is very happy when they see their fingers turn pink again and stop hurting especially when they realize how close they came to losing their fingers.



Microsurgically repaired ulnar artery restoring blood flow (often vein interposition graft reconstruction is required)