

# New Hand and Wrist practical exercises

A new series of AOTrauma Hand and Wrist practical exercises teach the techniques and principles of hand surgery using the new Variable Angle (VA) Modular Hand System for best practices in hand fracture fixation.

## What is new:

### Ten new AO teaching videos

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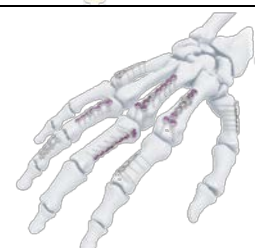
### Synbone models

- 9061.2 Hand and wrist sgl bone fx foam
- 9061.40 Thumb and index finger with structure
- 9061.50 Thumb and index finger bed
- 9062.2 Hand and wrist sgl bone fx foam



### DPS Course sets

- 532.0 Variable Angle (VA) Modular Hand Set

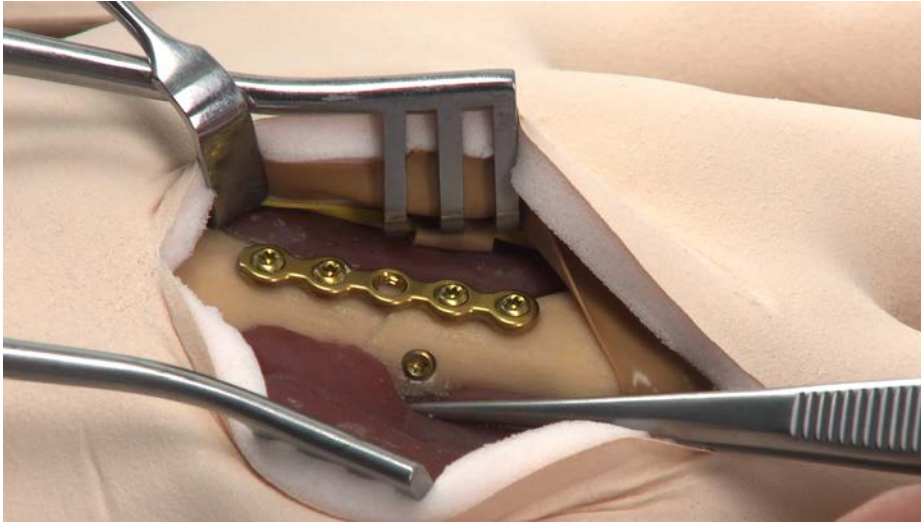


## Overview of new hand and wrist AO teaching videos

<b>Metacarpal III—Short oblique fracture—Fixation with a 2.0 mm lag screw and a 2.0 mm Variable Angle Adaption Plate</b> Video 22102 (replaces 22032)	Page 3
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## **Metacarpal III—Short oblique fracture—Fixation with a 2.0 mm lag screw and a 2.0 mm Variable Angle Adaption Plate**

**Video 22102 (replaces 22032)**

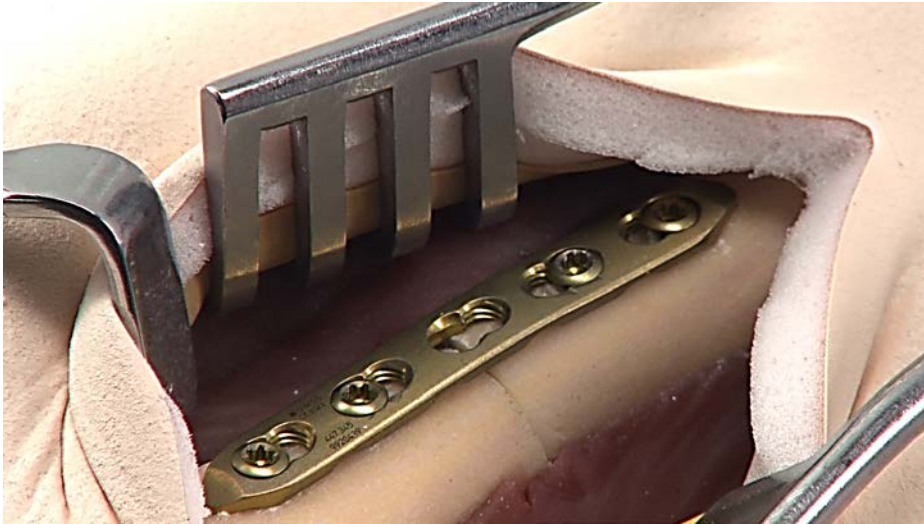


This exercise demonstrates the fixation of a short oblique metacarpal fracture using a 2.0 mm lag screw and a 2.0 mm variable angle adaption plate.

### **Learning Objectives:**

- Describe the surgical approach used for a short oblique metacarpal fracture
- Perform the fracture fixation using a 2.0 mm lag screw and a 2.0 mm Variable Angle Adaption Plate

## **Metacarpal II—Transverse shaft fracture—Fixation with a 5-hole 2.0 mm LCP plate Video 22103 (replaces 22033)**



This exercise demonstrates the fixation of a transverse shaft fracture of the metacarpal using a 5-hole 2.0 mm LCP plate.

### **Learning Objectives:**

- Describe the surgical approach to the second metacarpal
- Explain the reduction maneuver using the plate
- Perform the fixation of a transverse fracture of the metacarpal using a 2.0 mm LCP plate

## **Metacarpal V, neck—Subcapital and comminuted fractures—Intramedullary splinting with two 1.25 K-wires and ORIF using 1.5 mm VA Locking Metacarpal Neck Plate**

### **Video 22104 (replaces 22059)**



These exercises demonstrate different treatment options for unstable subcapital and comminuted neck fractures of fifth metacarpal.

#### **Learning Objectives:**

- Identify elements of the anatomy of the fifth metacarpal neck
- Correctly perform the stabilization of the fifth metacarpal neck fractures using intramedullary K-wires and/or a metacarpal neck plate

#### Exercise 1

Fifth metacarpal–subcapital neck fracture. Intramedullary splinting with 1.25 mm K-wires: stabilization of a subcapital fracture of the fifth metacarpal using two 1.25 mm K-wires inserted into the medullary canal.

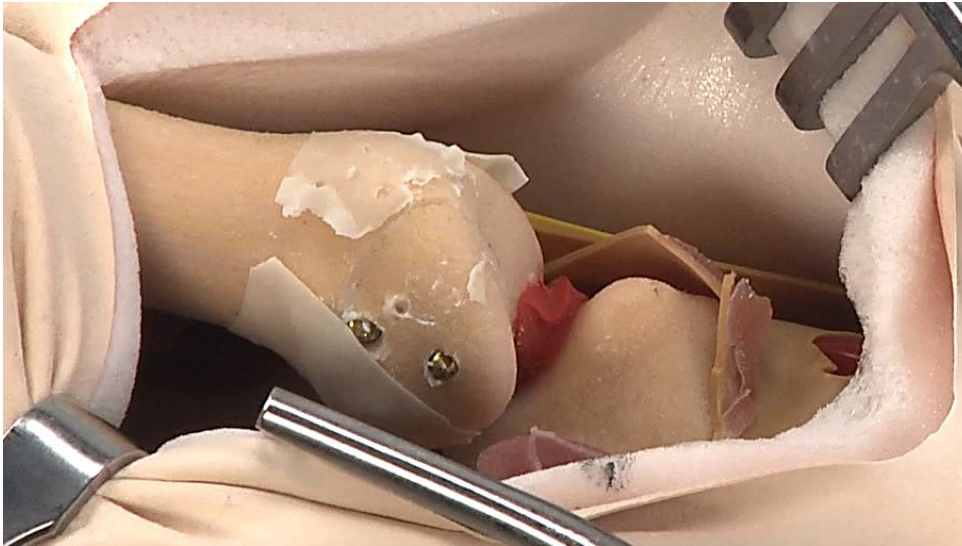
#### Exercise 2

Fifth metacarpal bone–neck fracture—Open reduction and fixation using 1.5 VA Locking Metacarpal Neck Plate: fixation of a fifth metacarpal neck fracture with a 1.5 Variable Angle Locking Metacarpal Neck Plate, which is designed with an anatomic contour and hole configuration to facilitate fixation of the head and neck of the metacarpals.



## **Metacarpal I, base—Bennett fracture—Fixation with 2.0 mm lag screws**

**Video 22105 (replaces 22052)**



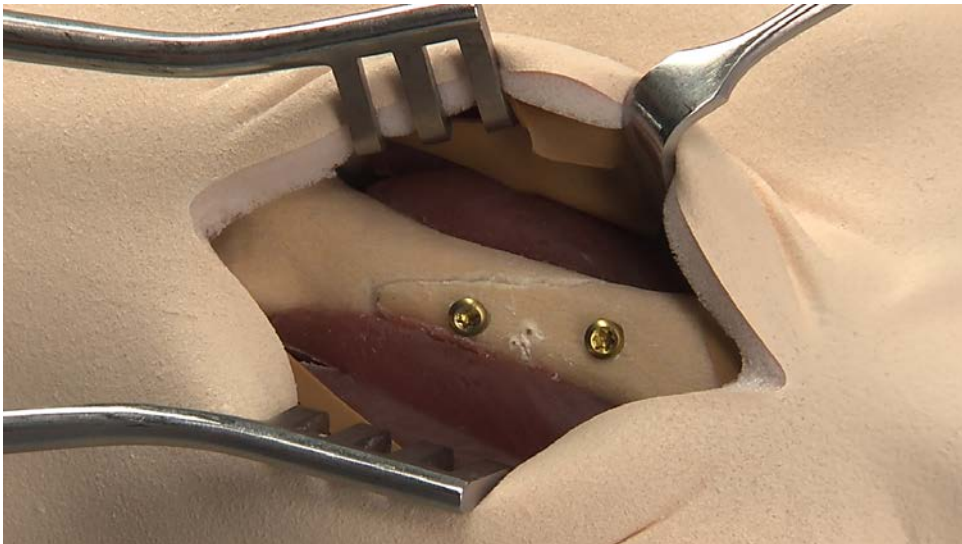
This exercise demonstrates the fixation of a Bennett fracture of the base of the first metacarpal with a sufficiently large fragment using 2.0 mm lag screws.

### **Learning objectives:**

- Describe the surgical approach to the Bennett fracture
- Perform the fixation of the Bennett fracture using lag screws
- Outline the postoperative regime

## **Metacarpal IV—Long spiral fracture—Fixation with two 2.0 mm lag screws**

**Video 22106 (replaces 22030)**

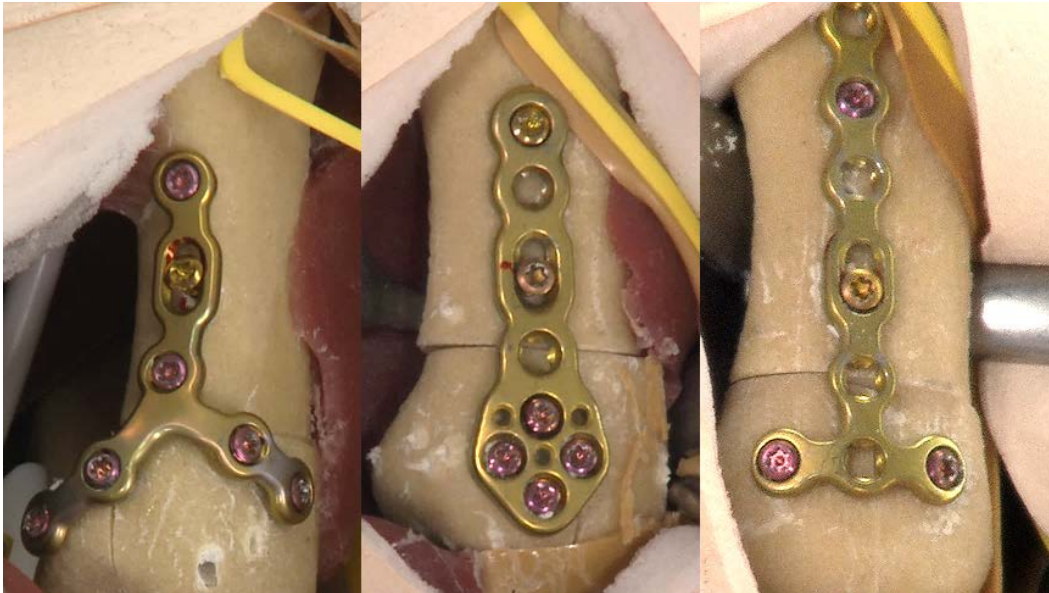


This exercise demonstrates the fixation of a long spiral metacarpal fracture using two 2.0 mm lag screws.

### **Learning objectives:**

- Describe the surgical approach for a spiral metacarpal fracture
- Explain the reduction technique
- Perform the fixation of the spiral metacarpal fracture using two lag screws

## **Metacarpal I, base—Rolando fracture—Plate fixation using various types of treatment Video 22107 (replaces 22036)**



These exercises demonstrate different treatment options for Rolando fractures.

### **Learning objectives:**

- Identify the anatomical elements of the first metacarpal base
- Using the appropriate plate correctly perform plate fixation of a Rolando fracture

### Exercise 1

Metacarpal I, base—Rolando fracture—Fracture fixation using 1.5 mm VA First Metacarpal Lateral Locking Plate: fixation of a first metacarpal fracture using a 1.5 mm Variable Angle First Metacarpal Lateral Locking Plate, which is designed to be contoured to fit the dorsal and radial periarticular surfaces.

### Exercise 2

Metacarpal I, base—Rolando fracture—Fracture fixation using 1.5 mm VA Locking First Metacarpal Dorsal Locking Plate: fixation of a first metacarpal fracture using a 1.5 mm Variable Angle First Metacarpal Dorsal Locking Plate, which is designed with an anatomic contour and hole configuration to facilitate fixation of the base of the first metacarpal.

### Exercise 3

First metacarpal, base—Rolando fracture—Fracture fixation using 1.5 mm VA Locking T-Plate: fixation of a first metacarpal fracture using a 1.5 mm Variable Angle Locking T-Plate.



**Index finger—Destroyed proximal interphalangeal joint—Arthrodesis of the joint, and fixation using tension band wiring**

**Video 22108 (replaces 22040)**



This exercise demonstrates how arthrodesis and tension band wiring are used to fix a destroyed proximal interphalangeal joint.

**Learning objectives:**

- Identify the anatomical elements of the proximal interphalangeal (PIP) joint
- Correctly perform a fusion of the PIP joint

**Thumb—Destroyed metacarpophalangeal joint—  
Arthrodesis of the joint, and fixation using 2.0 mm  
Locking Compression Plate  
Video 22109 (replaces 22041)**



This exercise demonstrates fixation of a destroyed metacarpophalangeal joint of the thumb using arthrodesis and 2.0 mm Locking Compression Plate.

**Learning objectives:**

- Identify the anatomical elements of the metacarpophalangeal joint of the thumb
- Correctly perform the fusion of the metacarpophalangeal joint

**Ring finger, proximal phalanx—Bone defect—  
Reconstruction using a bone graft and a 1.5 mm  
Variable Angle Locking Rotation Correction Plate  
Video 22110 (replaces 22037)**



This exercise demonstrates the reconstruction of the proximal phalanx using a bone graft and a 1.5 mm Variable Angle Locking Rotation Correction Plate.

**Learning objectives:**

- Identify the anatomical elements of the proximal phalanx
- Correctly perform the reconstruction of the proximal phalanx, using a bone graft and a plate

**Middle finger, proximal phalangeal head—Bicondylar fracture—Fracture fixation using a 1.5 mm Variable Angle Locking Phalangeal Head Plate  
Video 22111 (new exercise)**



This presentation demonstrates the fixation of a Bicondylar fracture of the proximal phalangeal head using a 1.5 Variable Angle Locking Phalangeal Head Plate.

**Learning objectives:**

- Identify the anatomical elements of the proximal phalangeal head
- Correctly perform the fracture fixation using a 1.5 Variable Angle Locking Phalangeal Head Plate