



YDFIX Clavicle Plate





References

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1 Introduction

Ydfix polyaxial plating system has 4 members for the most complete care of clavicle fractures. Apart from the anatomically formed superior and anterior versions the headed and hooked plates are also available. All this diversity of shapes have polyaxial locking features to make this system the most modern clavicle plating family.

1.1 | The implant

 Polyaxial angle stabilized system in step - free ±15 deg angulation of insertion



- Polyaxial and compression holes on the stem
- 4 different plate shapes:



Minimally invasive technique supporting system



- Bending facilitating holes no screw hole deformation
- Color coded Torx screws



1.2 | The instruments

• Capable of drilling in preset and $\pm 15 \deg$ directions step – free





- Double and dynamic drill sleeves for multifunctional locking
- Easy-to-use bending tools
- Instruments and implants in one tray
- Optimized instruments
- Color coded torque limiting screwdriver

1.3 | Indications

• For medial and distal third fractures of clavicle

2.1 | Ydfix Clavicle plate





grey

2.3 | Ydfix Clavicle plate HK



Color

grey

Implant range 2

2.2 | Ydfix Clavicle plate H

1	Holes on stem	Side
0	4	right/left
	5	right/left
	6	right/left
	7	right/left
	Raw material	

Anodized Titanium

Color

grey

2.4 | Ydfix Clavicle plate MA Holes on stem 6 7 8

Raw material
Anodized Titanium
Color

grey

2 | Implant range

2.5 | Ydfix screw Ø 2,7 mm

Length (mm)
8-14
Raw material
Anodized Titanium
Color
blue

2.6 | Ydfix screw Ø 3,5 mm

e	Length (mm)
	10-22
	Raw material
	Anodized Titanium
	Color
	green

2.7 | Cortical screw - TX Ø 2,7 mm

Length (mm) 8-14 Raw material Anodized Titanium Color

grey

2.8 Cortical screw - TX Ø 3,5 mm		
(AL)	Lenath (mm)	
	10-22	
	Raw material	
	Anodized Titanium	
	Color	

grey

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3 Surgical description

The YCL system conatins 4 types of plates. Apart from the shape and slightly different function of the plates the surgical steps are identical. These are to be introduced on the example of the Ydfix Clavicula plate - H (plate with head).

3.1 | Patient positioning

In beach chair or supine position on translucent surgical table. The head is rotated away from the affected shoulder. Reposition is helped by a tightly packed surgical tissue between the shoulder blades.

3.2 | Incision

Horizontal incision above or below the clavicula. Pay extra attention not to damage any of the local danger zones (i.e.: supraclavicular nerves)

3.3 | Temporary fixation

Reduce the fracture and use 1,6 mm Kirschner wires for temporary fixation.

3.4 | Plate selection

Choose the most appropriate plate size according to the nature of the fracture. If needed, modellate the plates with the bending tools supplied in the instrument tray.

Attention!

Avoid the extensive and the multiple to-and-back bending of the plate.

There are bending facilitating holes on the plates which make the bending of the plate possible without the screw hole deformation.



3.5 | Plate positioning

Place the plate to its position and fix it temporarily with 1.6 mm Kirschner wires.

3.6 | Screw insertion

The YCL headed plate fixes itself with 2,7 mm polyaxial screws on the head while on the tail 3,5 mm polyaxial

3.7 | Screw insertion on the head

First insert 2,7 mm polyaxial screws into the holes of the head of the plate. This can be performed monoor polyaxially.

3.7.1 | Monoaxial screw insertion (2,7 mm screws)

Place the straight part of the 2,0 mm double drill sleeve into the appropriate hole and perform drilling with 2,0 mm drillbit through that.

Determine necessary screw length with a depth gauge.

Alternative length gauging method:

Use the blue drill stop placed on the drillbit before drilling, just above the spiral part.





3 | Surgical description

Drill through the 2.0 mm sleeve. Below the stop the necessary value can be read.

Attention!

Perform length gauging accurately to avoid bicortical screws hurting soft tissues below the clavicula. For the same reason the protection of the area is also necessary during drilling. Apply image intensifier control!

Drive the 2,7 mm polyaxial screws in with the T9 screwdriver. The final tightening of the screw is always performed with the red handle and blue cup torque screwdriver.



3.7.2 | Poliaxial screw insertion (2,7 mm screws)

Fit the end of the conical part of the 2,0 mm double drill sleeve into the hole of the plate. There is a ± 15 degree freedom with reference to this position. Perform drilling with the 2,8 mm drillbit in the optimal direction under image intensifier control. Make sure to protect tissues below the clavicula.

Perform length gauging. Note that the drillbit and drillstop cannot be used for length gauging when using the conical side of the double sleeve.

Attention!

Perform length gauging accurately to avoid bicortical screws hurting soft tissues below the clavicula.





Drive the 2,7 mm polyaxial screws in with the T9 screwdriver. The final tightening of the screw is always performed with the red handle and blue cap torque screwdriver.

3.8 | Screw insterion on the tail

On the tail mono- or polyaxial and compression locking can be applied.

3.8.1 | Monoaxial screw insertion (3,5 mm screws)

Place the straight part of the 2,8 mm double drill sleeve into the hole of the plate and perform drilling through that with the 2,8 mm drillbit. Measure screw length.

Use the green drill stop placed on the drillbit before drilling, just above the spiral part. Drill through the 2,8 mm sleeve. Below the stop the necessary value can be read.

Attention!

Perform length gauging accurately to avoid bicortical screws hurting soft tissues below the clavicula. For the same reason the protection of the area is also necessary during drilling. Apply image intensifier control!





3 | Surgical description

Drive the screw in with T15 screwdriver. For the final tightening of the locking screws always use red handle and green cap torque screwdriver.



Drive the 3,5 mm polyaxial screws in with the T15 screwdriver. The final tightening of the screw is always performed with the red handle and blue cap torque screwdriver.

3.8.2 | Poliaxial screw insertion (3,5 mm screws)

Fit the end of the conical part of the 2,8 mm double drill sleeve into the hole of the plate. There is a ± 15 degree freedom with reference to this position. Perform drilling with the 2,8 mm drillbit in the optimal direction under image intensifier control. Make sure to protect tissues below the clavicula.

Perform length gauging. Note that the drillbit and drillstop cannot be used for length gauging when using the conical side of the double sleeve.

Attention!

Perform length gauging accurately to avoid bicortical screws hurting soft tissues below the clavicula.



3.8.3 | Compression screw insertion

Compression technique can also be used on the tail of the plate. To achieve compression use the double compression sleeve. On side is marked 1,0, which is the compression side while the other functions as neutral.

Put the required part of the double compression sleeve into the hole of the plate. Make sure that the small arrow shows towards the direction of the fracture. Perform drilling and length gauging.

Attention!

Use only the length gauge. The drillbit and drillstop technique cannot be used!

Drive in the appropriate screw. By using this technique 1 mm compression can be achieved.

3.9 Closing of the wound

After image intensifier control close the wound in the usual fashion.

3.10 | Using cancellous screws

For the YCL plates AO type cancellous screws can also be used. Please note that they require some separate instruments which cannot be found in YCL tray. See section Implant list for reference.







4 | Implant list

4.1 | Ydfix Clavicle plate



Cat. no	Size
3043402006	Left/6H
3043402008	Left/8H
3043402010	Left/10H
3043401006	Right/6H
3043401008	Right/8H
3043401010	Right/10H

4.3 | Ydfix Clavicle plate - HK



4.2 | Ydfix Clavicle plate - H



Cat. no	Size
3044402004	Left/4H
3044402005	Left/5H
3044402006	Left/6H
3044402007	Left/7H
3044401004	Right/4H
3044401005	Right/5H
3044401006	Right/6H
3044401007	Right/7H

4.4 | Ydfix Clavicle plate - MA



Cat. no	Size
3047402003	S Left 3H
3046402003	M Left 3H
3045402003	L Left 3H
3047402005	S Left 5H
3046402005	M Left 5H
3045402005	L Left 5H
3047401003	S Right 3H
3046401003	M Right 3H
3045401003	L Right 3H
3047401005	S Right 5H
3046401005	M Right 5H
3045401005	L Right 5H

Cat. no	Size
3048400006	6H
3048400007	7H
3048400008	8H

4 | Implant list

4.5 | Ydfix screw Ø 2,7 mm



Cat. no	Size
1017427008	8 mm
1017427010	10 mm
1017427012	12 mm
1017427014	14 mm





4.6 | Ydfix screw Ø 3,5 mm

	1	
T	7	
	-	

Cat. no	Size
1017435010	10 mm
1017435012	12 mm
1017435014	14 mm
1017435016	16 mm
1017435018	18 mm
1017435020	20 mm
1017435022	22 mm

4.7 | Cortical screw - TX Ø 2,7 mm

(AP)
3
2
- T

Cat. no	Size
1032427008	8 mm
1032427010	10 mm
1032427012	12 mm
1032427014	14 mm

Cat. no	Size
1032435010	10 mm
1032435012	12 mm
1032435014	14 mm
1032435016	16 mm
1032435018	18 mm
1032435020	20 mm
1032435022	22 mm

5 | Instrument list

5.1 Instruments				
Screwdriver (T9)	1 pc	5210720009	Double drill sleeve - PAS (2,8 mm)	1 μ
Screwdriver (T15)	1 pc	5210720015	Double drill sleeve - V (Small)	1
Torque screwdriver (T9 / 1 Nm)	1 pc	5210510036	Kirschner wire (1,6x150 mm)	5 p
Torque screwdriver (T15 / 15 Nm)	1 pc	5210510044	Screw forceps	1
Spiral drill (2x125 mm)	1 pc	5280114903	Drill stop (blue) (2 mm)	2 p
Spiral drill (2,8x135 mm)	1 pc	5280122905	Drill stop (green) (2,8 mm)	2 ¢
Double drill sleeve - PAS (2 mm)	1 pc	DIA 2.0 5280114902	Depth gauge (2,7-3,5 mm)	1



5 | Instrument list







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