

Halo Frame

Operating Manual



Why choose Fule?

Our Advantage

The company is a national high-tech enterprise integrating research and development, production and sales of medical devices, with full intelligent processing equipment production line.

Academician and expert studio was established to help Fule improve its R&D capabilities and further deepen production-study-research cooperation; Approved postdoctoral research station.

With complete hardware facilities, excellent research and development team, and close cooperation with clinical experts, we have obtained more than 100 domestic and foreign patents.

Based on the agent cooperation pattern, to establish a nationwide sales and service network, product supply nearly thousand 3 armour hospital in our country, are exported to more than 20 overseas countries.

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Beijing Fule Science&Technology Development Co.,Ltd

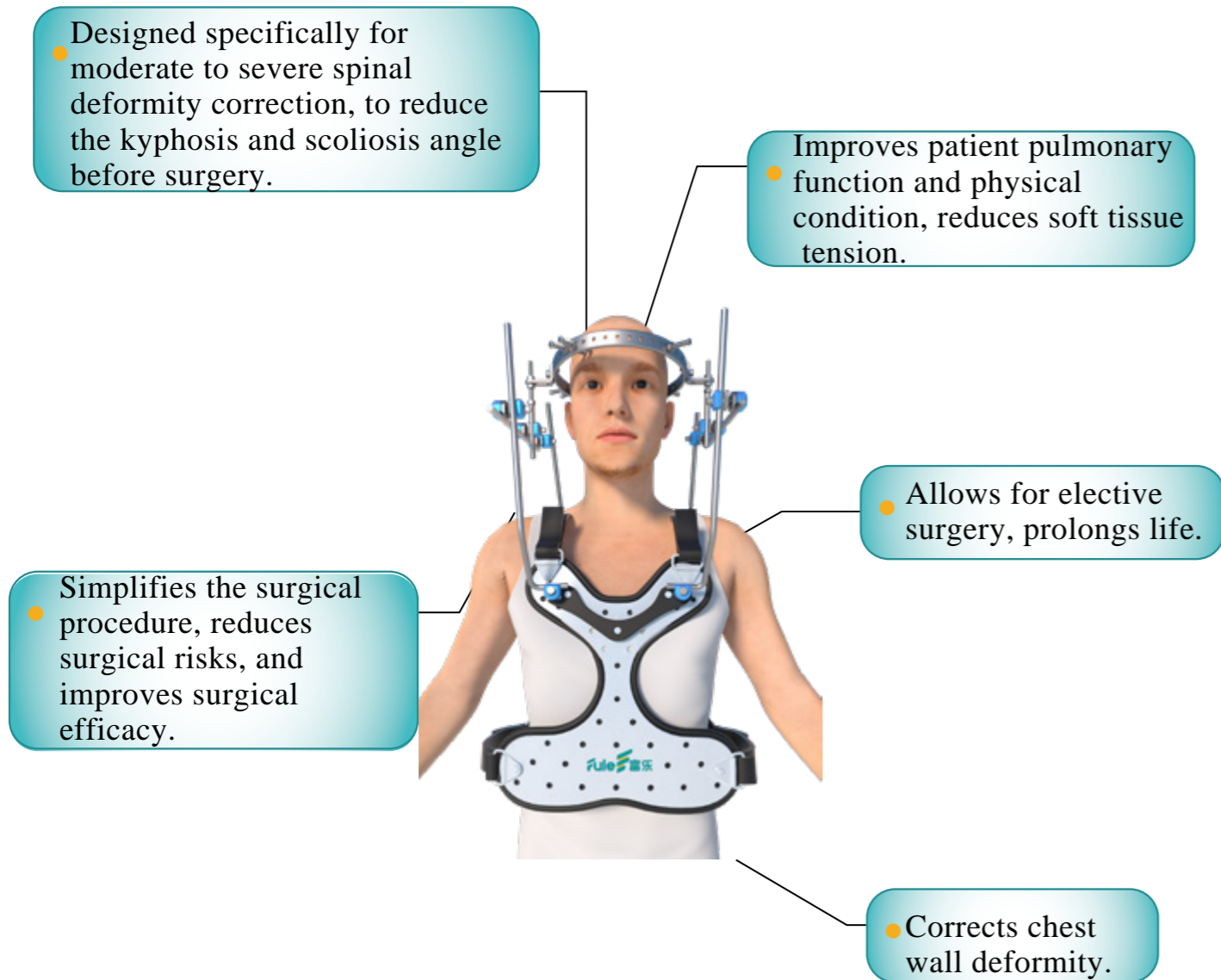
Post Code:101204

Sale hot line:010-60999861/2 Fax:010-60999863/8741

Tel:010-60999866/32/75/17 E-mail:YXSC@fulekejicom

Add:No.50, Mafan g West Industry Zone,Pnggu District,Beijing

Surgical procedure



Instructions for Use

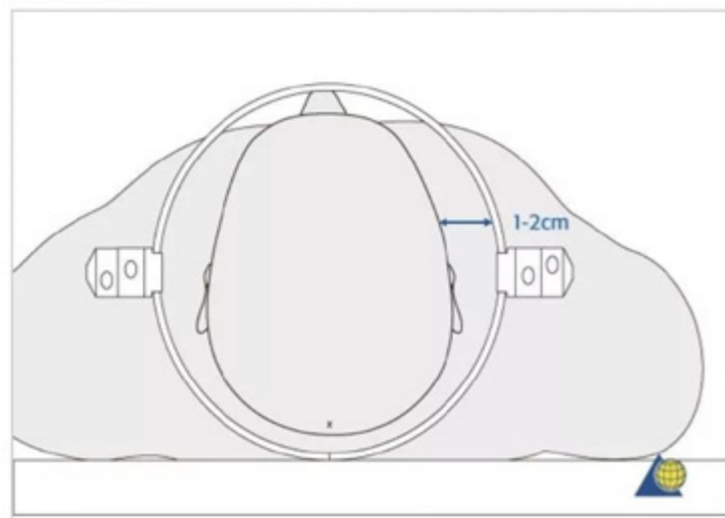
- [Indications]**
 - Cobb angle greater than 75°
 - Severe chest wall deformity
 - Severely diminished cardiopulmonary function
 - Severe vertebral rotation, difficult to correct in a single surgery
- [Contraindications]**
 - Spinal stenosis
 - Spondylolisthesis
 - Acute lumbar sprain
 - Tuberculosis, tumors
 - Osteoporosis
 - Lumbar leg pain

Surgical Procedure

[Step 1] Patient Positioning

Install the Halo frame with the patient in the supine position. Choose the appropriately sized head ring, positioned in the "sweatband" area. The entire ring should be 1-2 cm away from the skull at all points.

Halo size

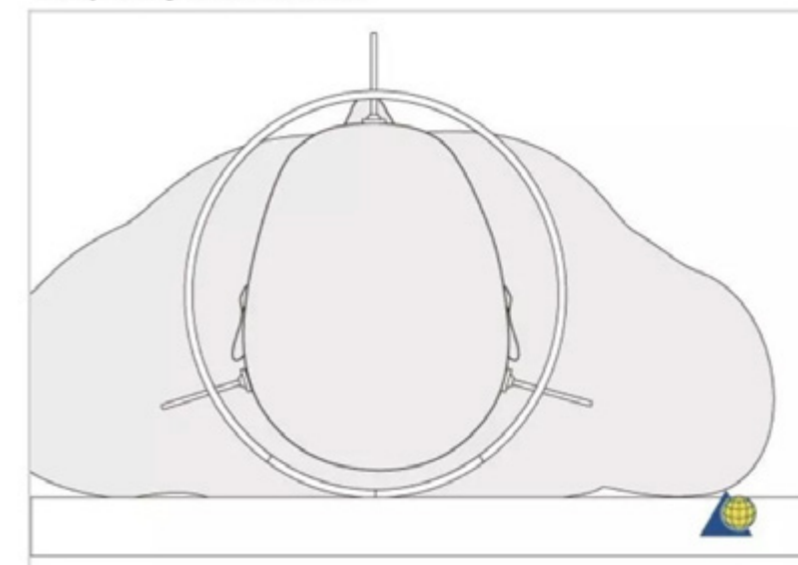


Surgical Procedure

[Step 2] Temporary Fixation

First, perform temporary three-point fixation. Preliminarily adjust the distance and position of the head ring.

Temporary halo fixation

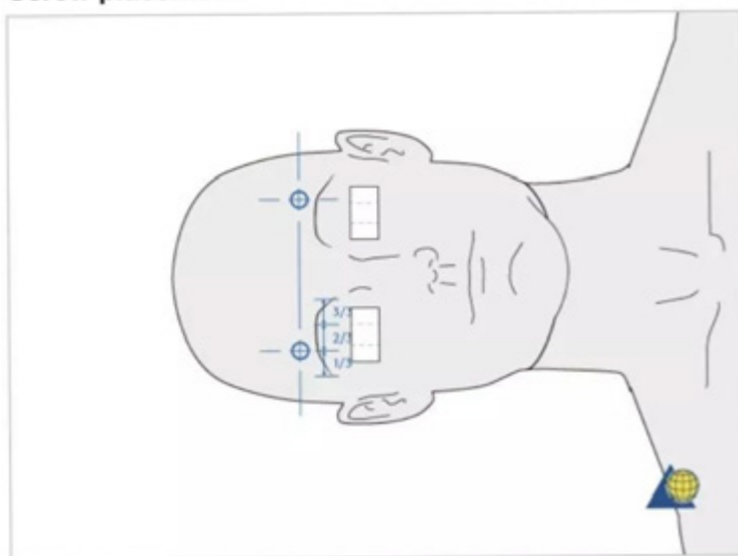


Surgical Procedure

[Step 2] Pin Insertion Points

The anterior pin insertion point on the head ring is located 1 cm above the eyebrow, at the lateral one-third point. If inserting pins under local anesthesia, the patient must keep their eyes closed during placement. If inserted with eyes open, the patient may experience a pulling sensation on the eyelids or even difficulty closing their eyes after the procedure.

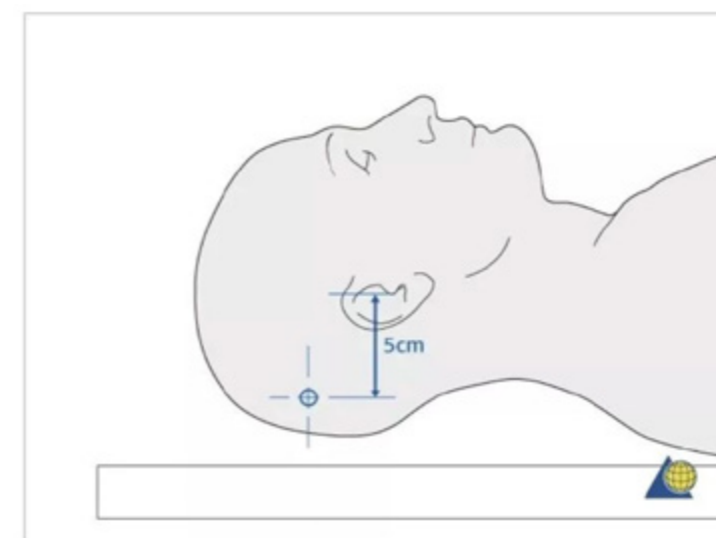
Screw placement



Surgical Procedure

[Step 2] Pin Insertion Points

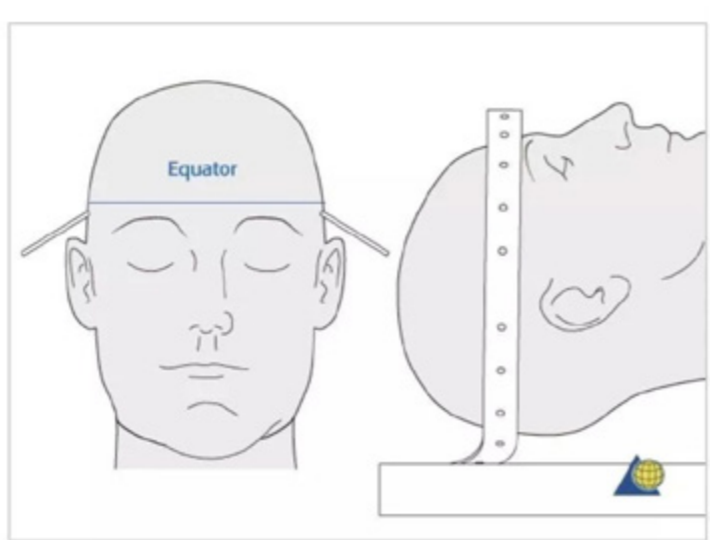
The posterior pin insertion point on the head ring is located 5 cm behind the tip of the ear. The ideal pin placement has the anterior and posterior pins in a diagonal relationship relative to each other.



Surgical Procedure

[Step 2] Tightening

The head ring should be placed horizontally and not tilted. For adults, the head ring requires 4 pins to ensure stability. For children, 6-8 pins are recommended.

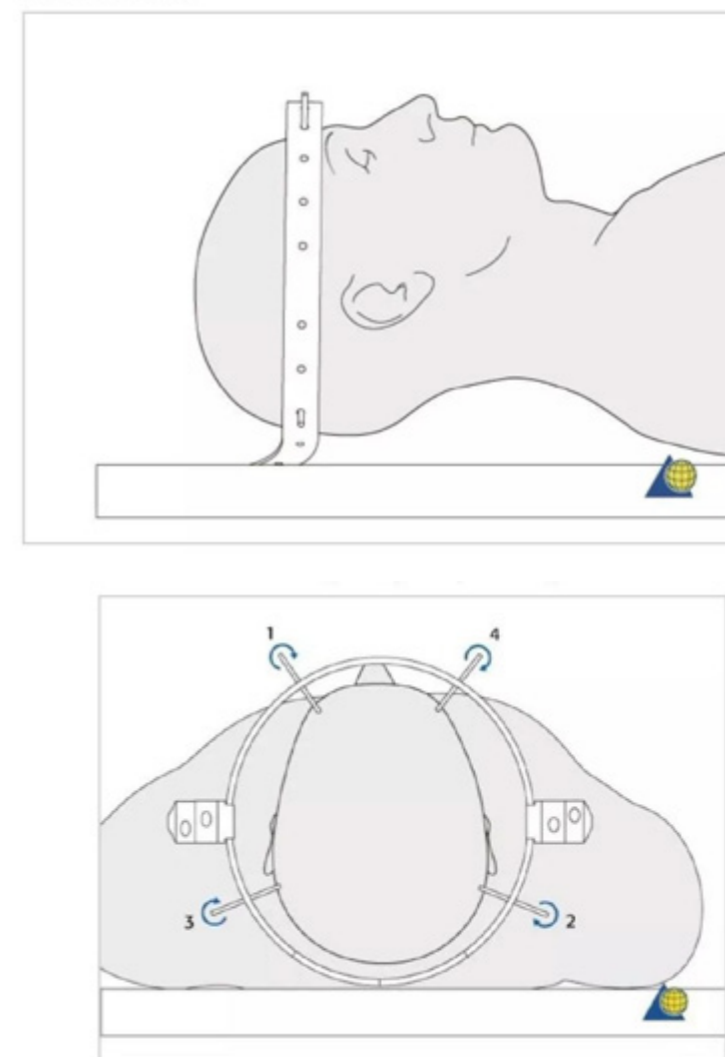


Surgical Procedure

[Step 3] Tightening

Tighten all screws, ensuring they are tightened symmetrically. Follow the diagonal sequence shown in the figure: 1, 2, 3, 4. If using a torque wrench, the maximum torque for adults is 0.56kg/cm^3 (Note: Verify unit, likely $\text{kgf}\cdot\text{cm}$ or Nm). For children, reduce by half, using 0.28kg/cm^3 . Be extremely careful not to over-tighten and penetrate the skull.

Halo fixation



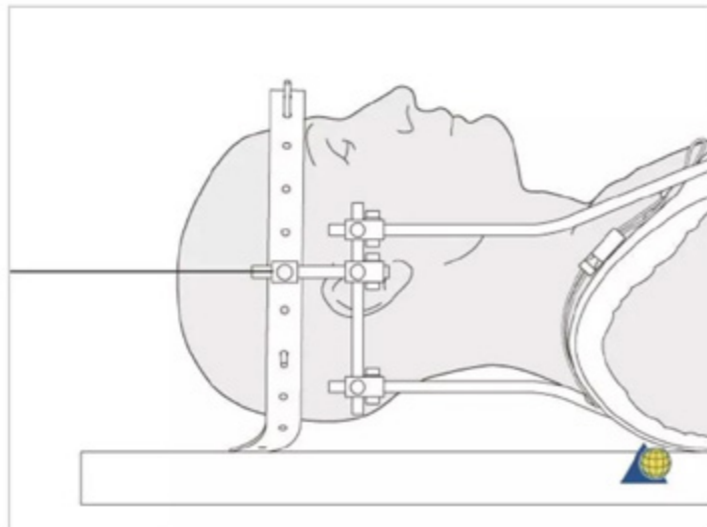
Surgical Procedure

[Step 3]

Traction Reduction

If cervical traction reduction is required, the traction ring (or halo) should be positioned at the level of the ears and connected to the head ring. Connect the traction weights to perform gradual closed reduction traction.

Reduction



Surgical Procedure

[Step 4]

Traction Reduction

Position the patient with the head of the bed elevated and the foot lowered. Start with an initial weight of 6 kg, increasing by 1 kg every 6 hours until reaching a maximum weight of 15 kg. It is recommended to take X-rays to check the reduction status after each weight increase.





固定环体 (II)
Head Fixation Ring II

产品规格 Description	产品编码 Product Code	数量 Number
270×203	502-012	1



调节块
Extend Clamp

产品规格 Description	产品编码 Product Code	数量 Number
51	502-024	2



调节螺钉
Screw

产品规格 Description	产品编码 Product Code	数量 Number
S=10	502-025	2



锁定螺钉
Titanium Screw

产品规格 Description	产品编码 Product Code	数量 Number
Φ6.0×60	3939060060	8



螺母
Nut

产品规格 Description	产品编码 Product Code	数量 Number
10	21300198	2



螺纹杆
Threaded Rod

产品规格 Description	产品编码 Product Code	数量 Number
80	21300287	2



螺纹杆
Threaded Rod

产品规格 Description	产品编码 Product Code	数量 Number
80	6002006080	2



开式杆杆固定夹
Open-Type Rod to Rod Clamp

产品规格 Description	产品编码 Product Code	数量 Number
Φ8	640401001	6

连接杆
Connecting Rod

产品规格 Description	产品编码 Product Code	数量 Number
Φ8×250	640807005	2



连接杆
Connecting Rod

产品规格 Description	产品编码 Product Code	数量 Number
Φ8×400	21200134	2



连接杆
Connecting Rod

产品规格 Description	产品编码 Product Code	数量 Number
Φ8×400	21200135	2

夹杆组件
Clamp rod component

产品规格 Description	产品编码 Product Code	数量 Number
	90300002	4



胸腰椎固定器
Thoracolumbar spine fixator

产品规格 Description	产品编码 Product Code	数量 Number
中	90300001	1

