



Navigating the Way to Trustworthy Healthcare.
Guiding the Future of Precision Medicine.

MIS INVESTMENT: PERFECT TIMING

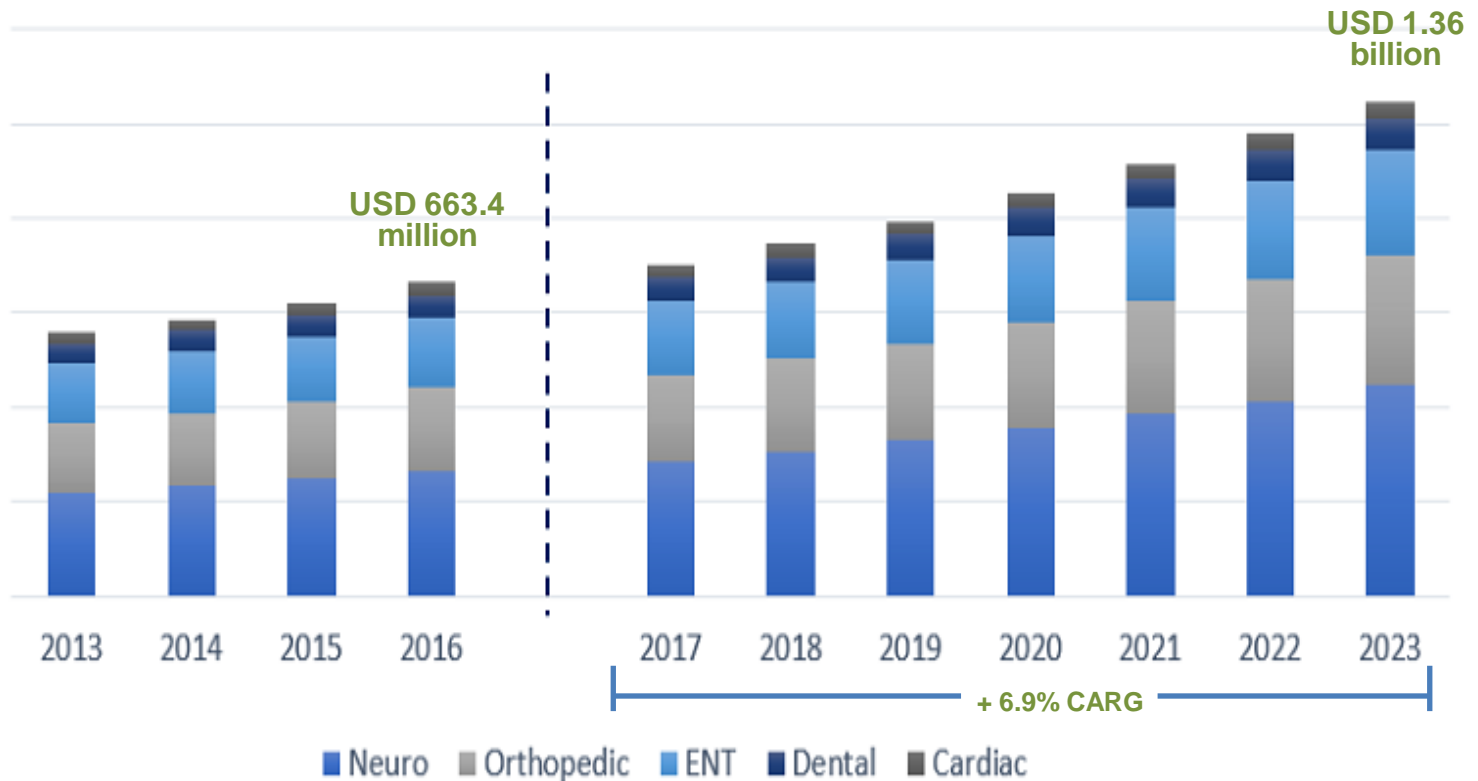
- **Minimally invasive surgery (MIS)** continues to play an important role in general surgery as an alternative to traditional open surgery as well as traditional laparoscopic techniques.
- Since the 1980s, technological advancement and innovation have seen surgical techniques in MIS rapidly grow as it is viewed as more desirable.

MIS INVESTMENT: PERFECT TIMING

- The cranial navigation devices market is expected to expand at a significant pace during 2019 and all the way to 2023. This is due to factors such as rise in the incidence of brain disease, technological advancements in image-guided surgery, and extensive research and development in brain-related disorders.
- Asia Pacific is expected to account for a significant share of the global market, in terms of revenue, during the forecast period. Rise in support from governing bodies and the private sector in developing effective and novel therapeutics in the field of brain-related diseases is anticipated to drive the market in the region.

Markets for the Surgical Navigation System Industry

GLOBAL SURGICAL NAVIGATION SYSTEM MARKET, BY APPLICATION \$M (2013 - 2023)



Source: P&S Intelligence

Markets for the Surgical Navigation System Industry

Surgical Navigation System Market Overview

- The global surgical navigation system market size was valued at **US\$663.4 million** in 2016, and is projected to grow at CAGR of **6.9% from 2017-2023**. (expecting market to grow to **US\$1.136b in 2023**)
- The market will be led by optical navigation systems, both in terms of size and growth, attributable to the rising adoption of optical technologies such as fluoroscopy and computed tomography (CT) based technologies in the recently launched navigation systems for performing surgeries and increasing preference for optical navigation technology among surgeons.
- The surgical navigation systems are used for **various applications** such as neuro, orthopedic ENT, cranio-maxillofacial, dental and cardiac navigation.
- **Navigation systems** are majorly used in neuro surgeries and are predicted to witness the fastest growth in demand, at a CAGR of **7.7%** during the forecast period and this is attributable to the ability of neuro navigation system to provide real-time intraoperative guidance during brain and/or spinal surgery.

Medical Navigation Solutions

Stereotactic Surgery Navigation Solutions

RETINA from EPED Inc.

Core Values

- EPED Inc. is a leading company in the field of minimally invasive surgery.
- Upholding the values of **“safety, precision, efficiency and minimally invasive”**, we strive constantly to develop innovative medical navigation solutions.
- From training systems to clinical solutions, we are dedicated to enhancing the quality and safety of medical treatment on all levels.

Our Certifications

- With extensive clinical experiences, we firmly believe that excellent medical practice is achieved by starting from smart devices.
- Based on this belief, EPED Inc. has grown steadily and has been certified with ISO13485, medical device GMP quality management certification and CE certificate.

GMP



CE
2460

Core Technology

- At EPED Inc., we bring together a professional and enthusiastic team to develop medical image software, medical software with **Optical Space Location Technology** as the core.
- We present the most adaptive and customizable navigation solutions with world-class accuracy and the most user-friendly software interface with punctual after-sales service.
- Together with surgeons and professionals, we strive to maximize the values of smart healthcare and to lead the future of minimally invasive surgery industry.

Maximum Precision and Accuracy

Our Technology

$$RMS = \sqrt{\frac{\sum_{i=1}^n \{(ErrX_i)^2 + (ErrY_i)^2 + (ErrZ_i)^2\}}{n}}$$

RMS=0.1016 mm

RETINA

Stereotactic Surgery Navigation System

Integrate Digital Medical Imaging for Better Surgical Accuracy

- The RETINA combines intelligent medical technologies and services which can integrate digital medical imaging for better surgical accuracy.
- **The RETINA also reduces unnecessary tissue injuries, to aid in minimally invasive surgeries,** improve surgical quality, and reduce the risk of surgical complications, which provide overall better medical service for patients.

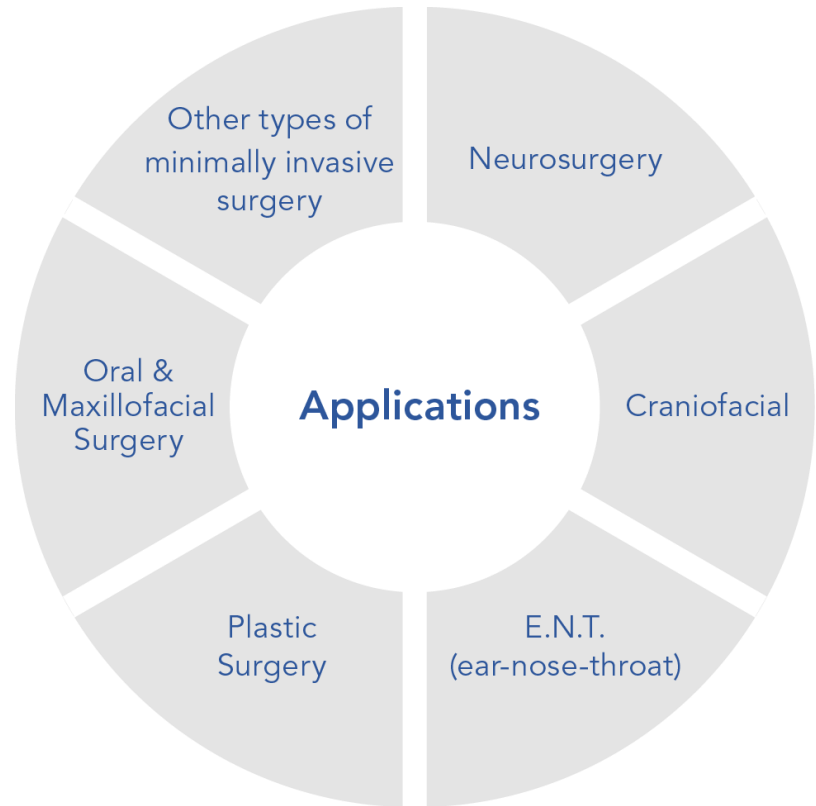


RETINA

Stereotactic Surgery Navigation System

Choosing RETINA

- Minimally invasive surgery
- Precise Optical Space Location Technology
- High compatibility
- User-friendly hardware and software
- High cost-performance value



RETINA

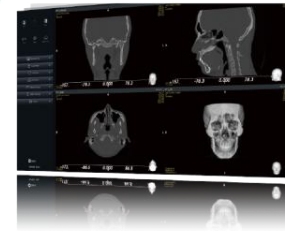
Register the 360° positioner with the Retina tracking system



Navigate instruments in real-time with high accuracy performance

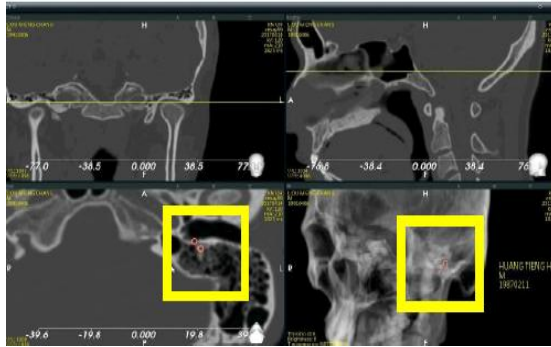


Medical CT and MRI fusion image



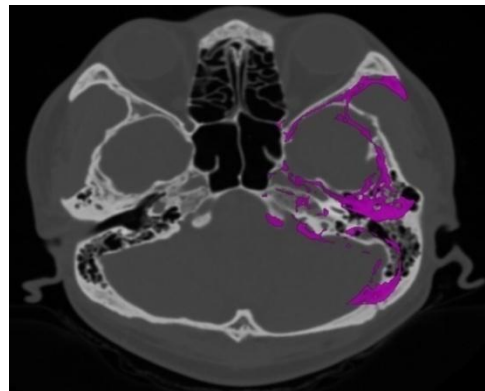
3D Optical Space Location Technology

RETINA: Key Features



Segmentation

Help doctors make plans before and/or during surgery to place the bone at the correct location during operation.



Nerve Indication

Help doctors identify nerve locations so that injuries to dangerous areas can be avoided during surgery.



Mirror

Mirror from the right unaffected side on the left fractured side. Indicating the intraoperative placement of the mirror object with surgical navigation.

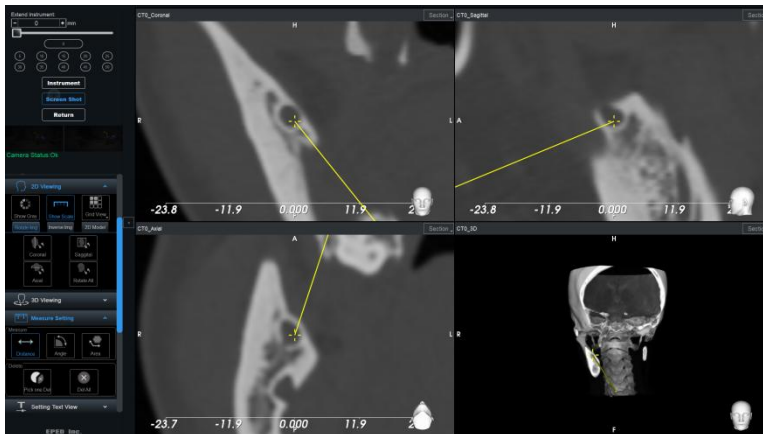
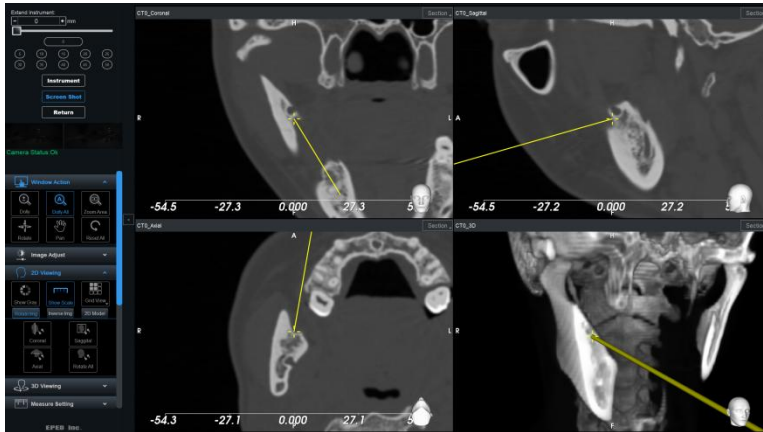
Retina in the OR

Stereotactic Surgery Navigation Solutions
applied in real surgeries

RETINA: Clinical Cases

ORAL SURGERY

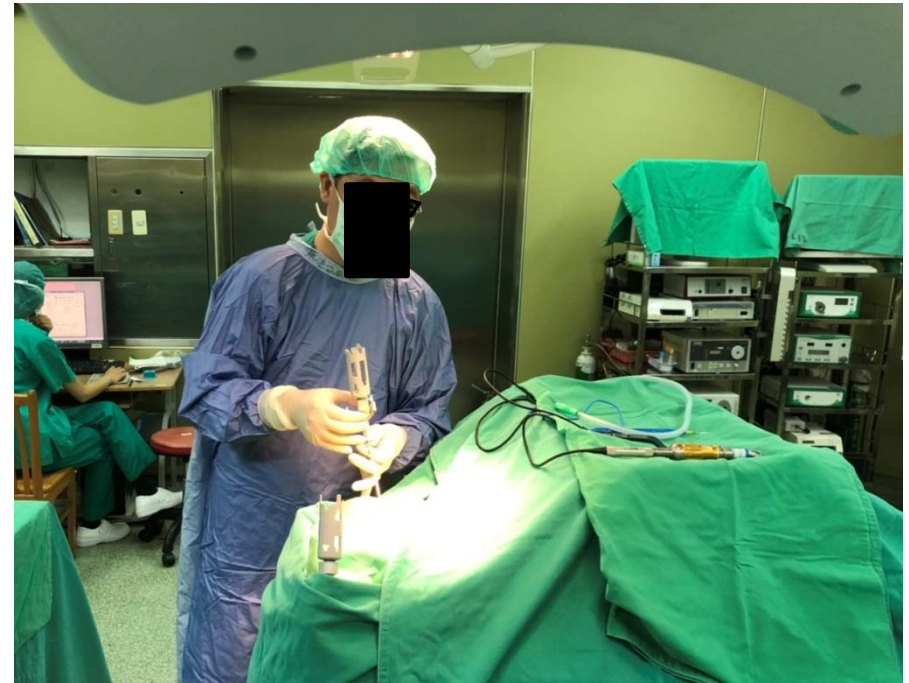
Mandible tumor removal



RETINA: Clinical Cases

NEUROSURGERY

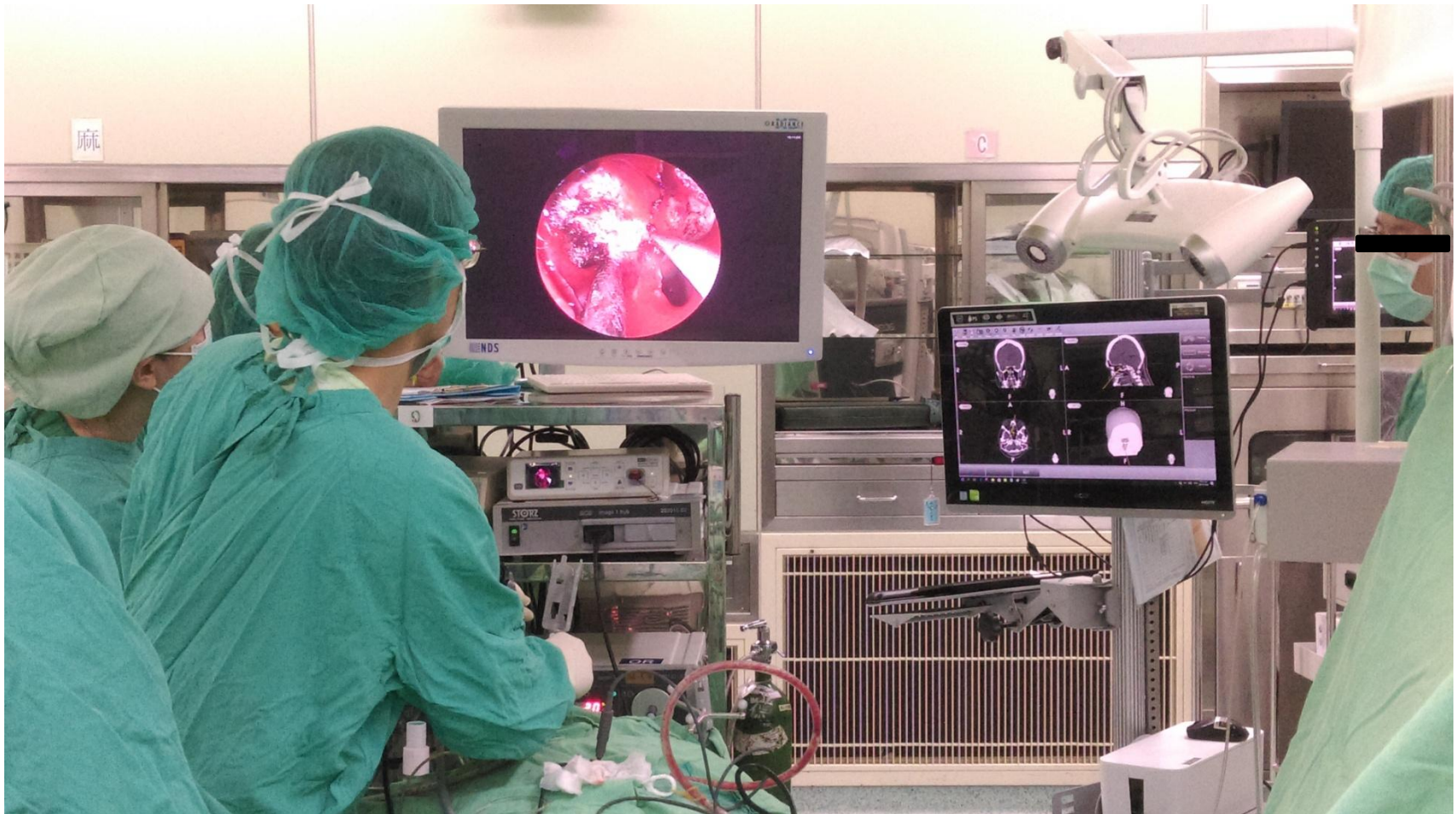
CSF Suction



RETINA: Clinical Cases

NEUROSURGERY

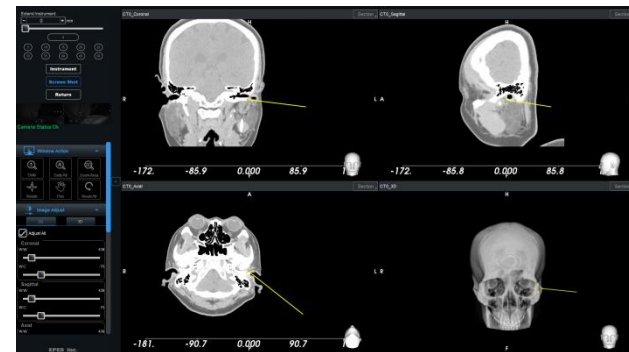
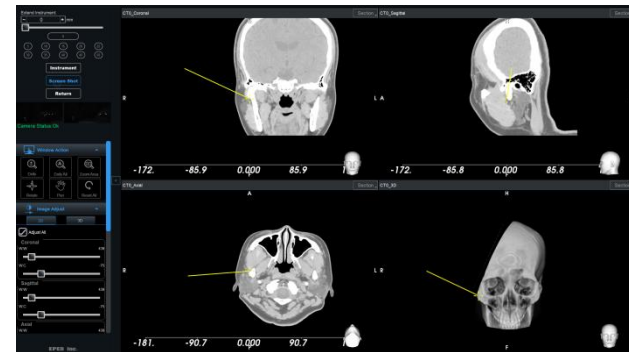
Pituitary tumor removal



RETINA: Clinical Cases

NEUROSURGERY

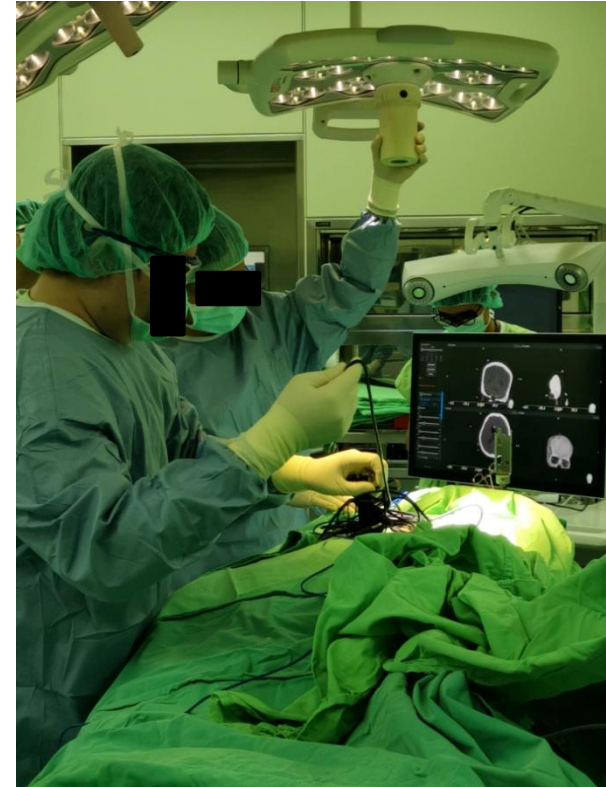
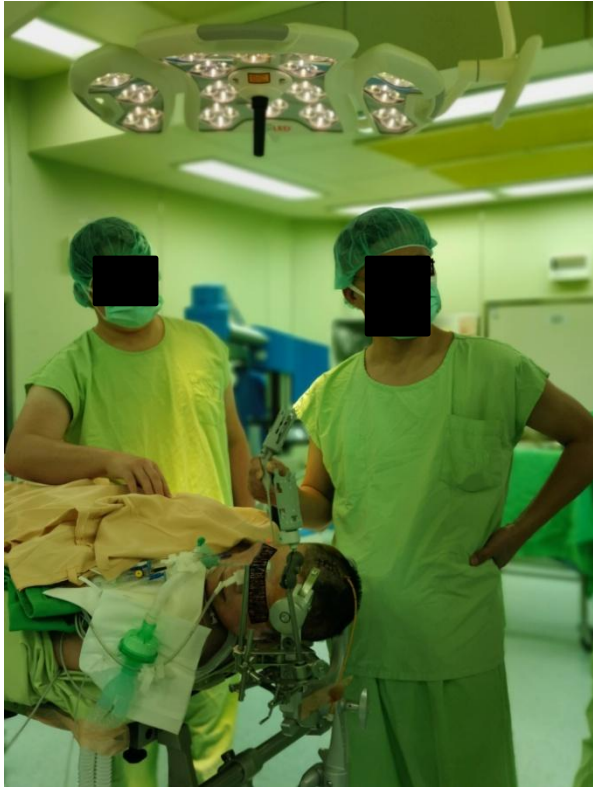
Occipital tumor removal



RETINA: Clinical Cases

NEUROSURGERY

CSF Suction



RETINA: Clinical Cases

NEUROSURGERY

VP Shunt



RETINA: Clinical Cases

NEUROSURGERY

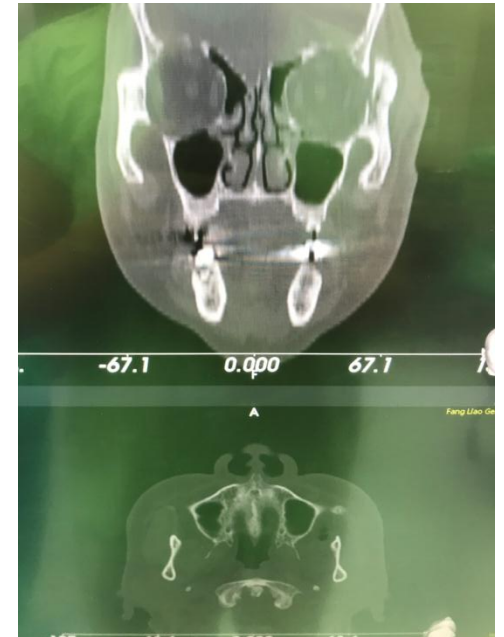
Hydrocephalus on the Right Hemisphere



RETINA: Clinical Cases

NEUROSURGERY

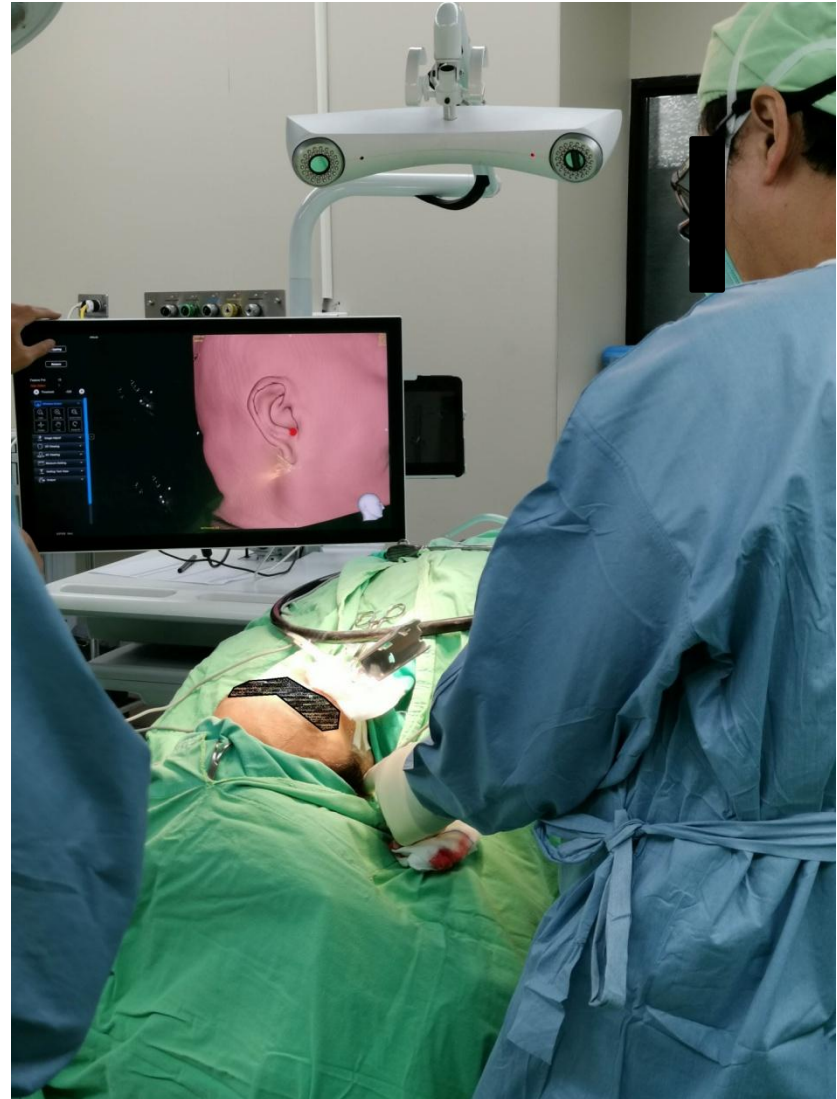
Pituitary gland tumor



RETINA: Clinical Cases

PLASTIC SURGERY

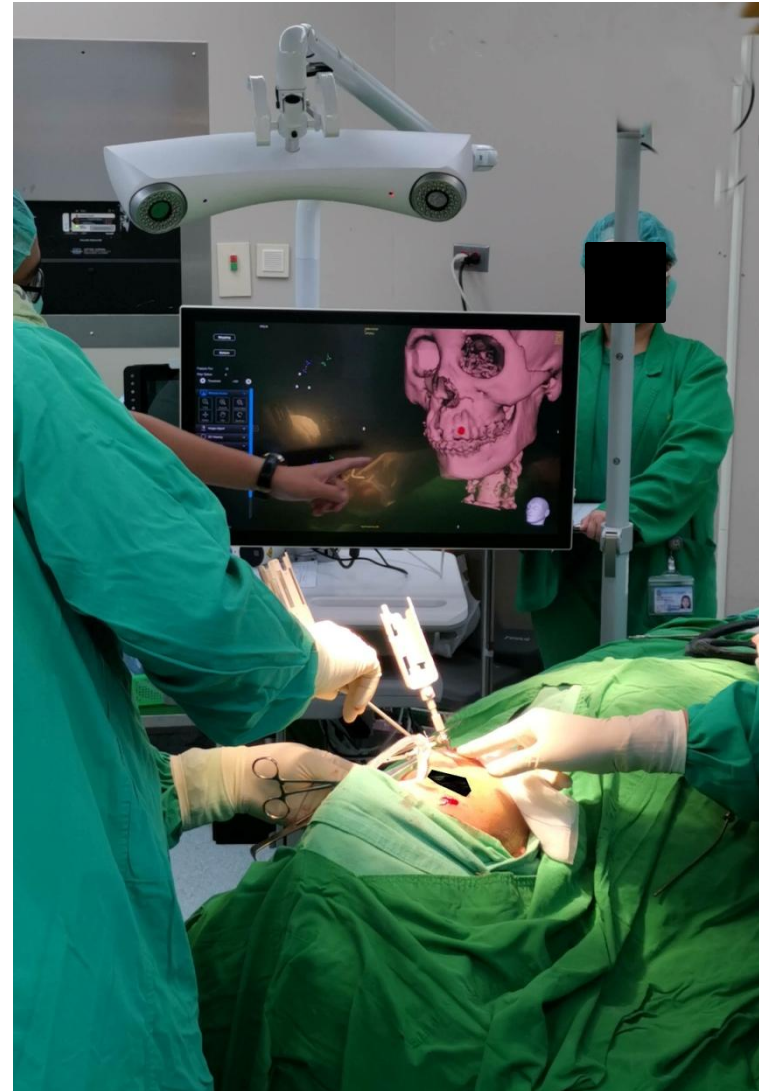
Fracture in cheekbone



RETINA: Clinical Cases

PLASTIC SURGERY

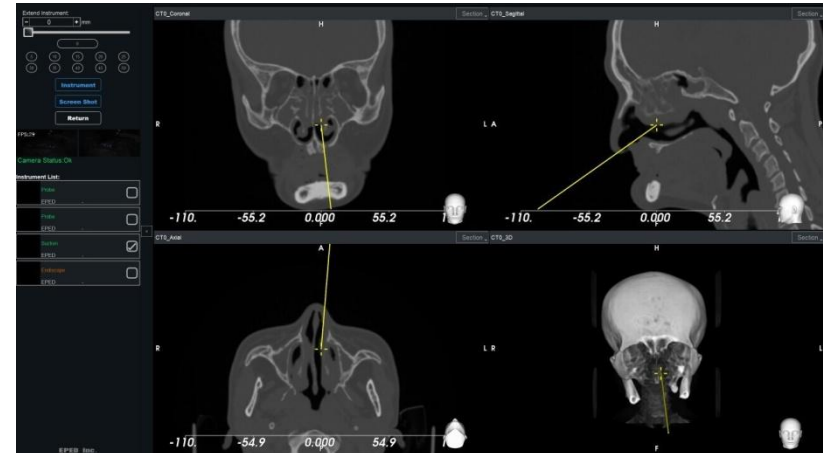
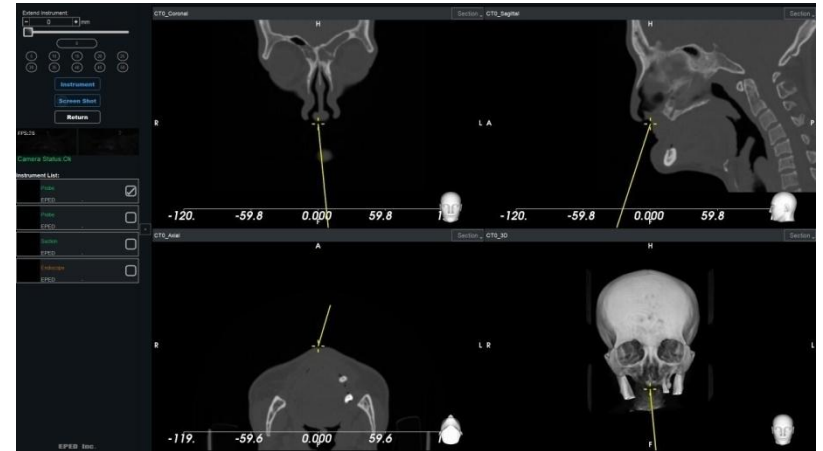
Triple fracture in cheekbone



RETINA: Clinical Cases

ENT

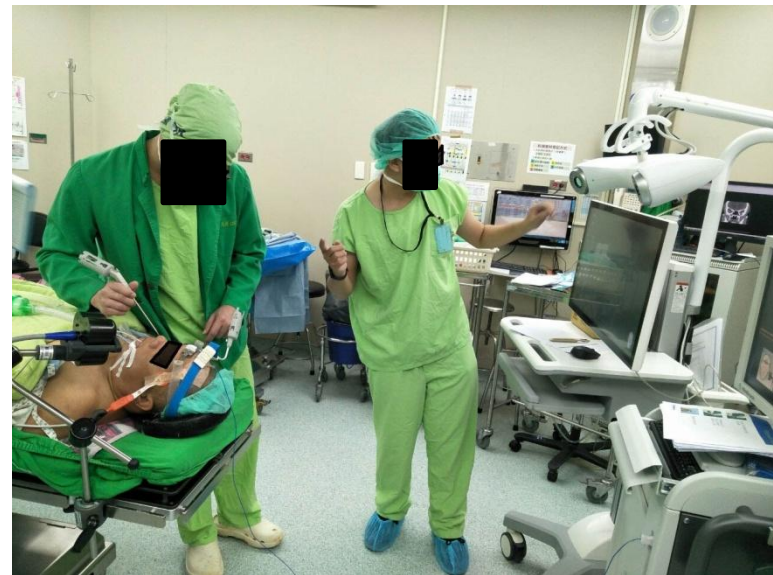
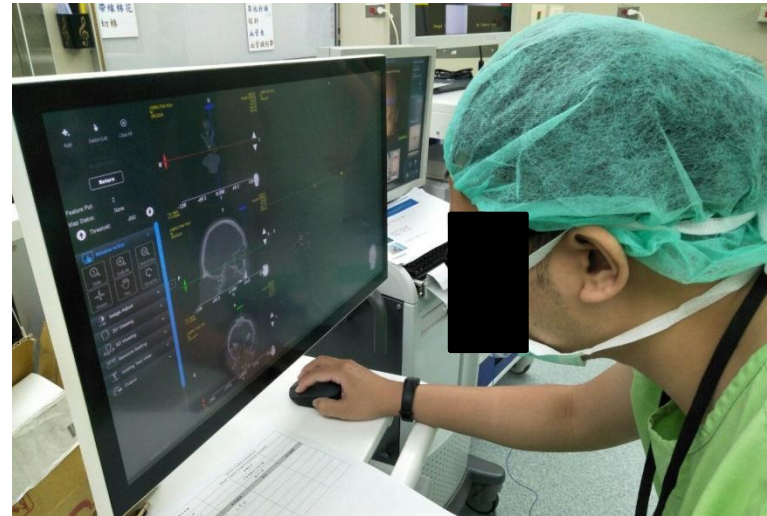
Sinus tumor removal



RETINA: Clinical Cases

ENT

CFS leakage



RETINA: Clinical Cases

ENT

Functional Endoscopic Sinus Surgery





Kaohsiung Head Office

2F, No. 90, Luke 5th Rd., Luzhu Dist.

Kaohsiung City, 821, Taiwan

T. +886-7-6955596

F. +886-7-6955579

Taipei Office

7F-2, No. 128, Sec. 2 Dunhua S. Rd.,

Da'an Dist., Taipei Cituy 106, Taiwan

T. +886-2-27067018

F. +886-2-27554919