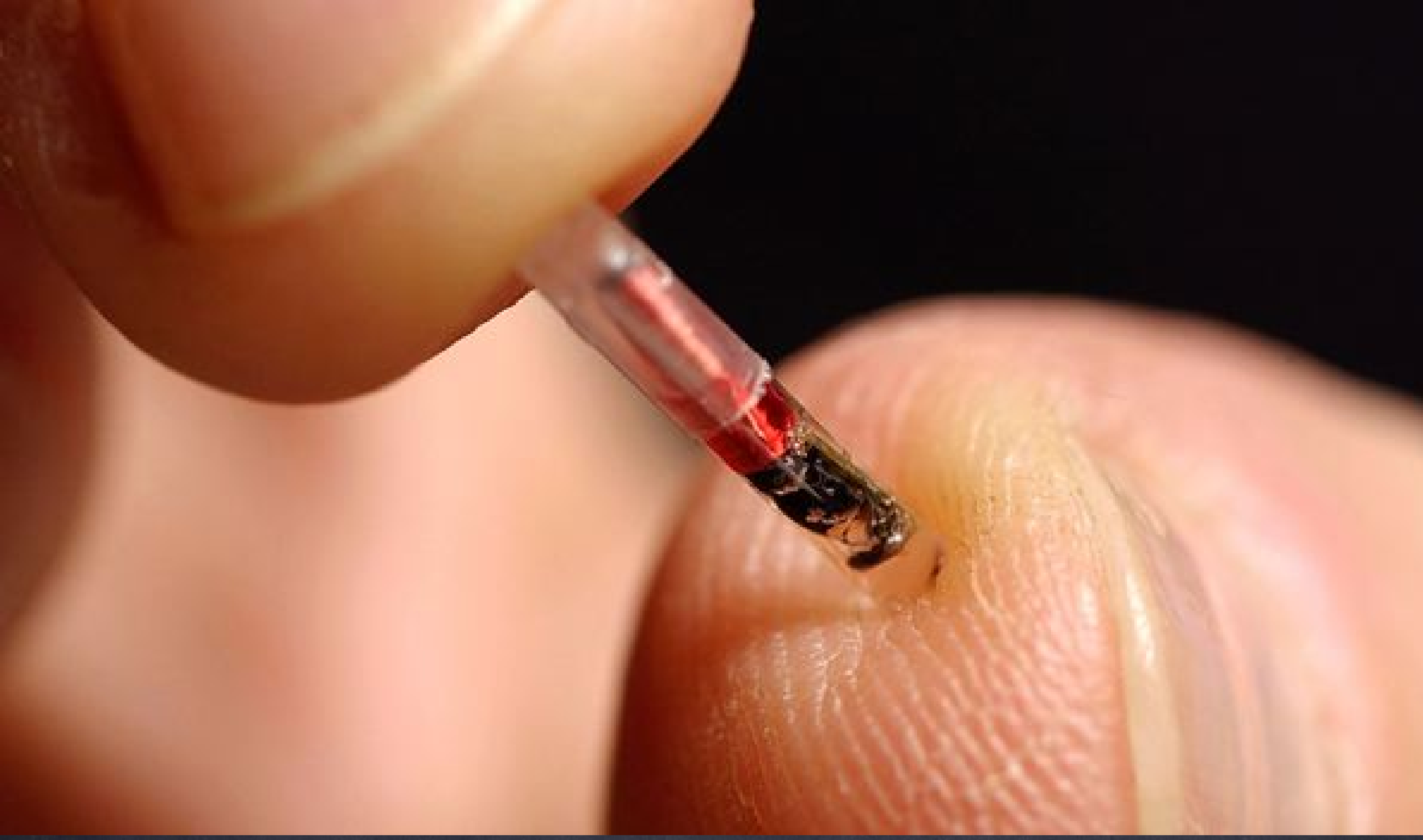
Spark innovation

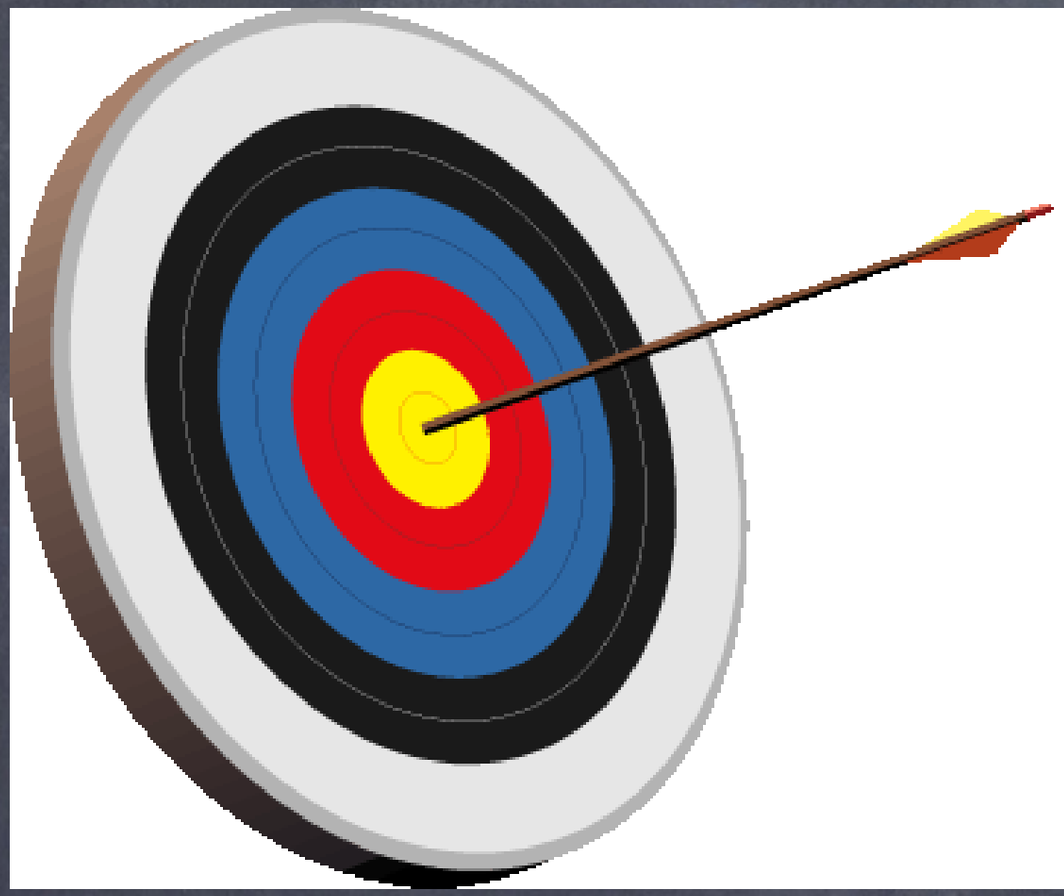
Sunton Wongsiri, MD

10 things for innovator

1 Find out the real problem



2 Make it better , convenience, easy to use



3 Set aim and set plan

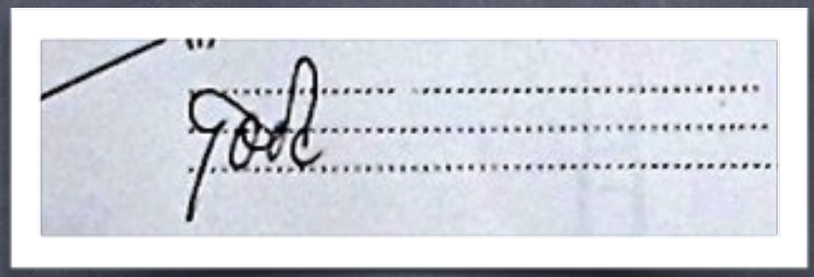
4 Searching (google)

PROACTIVE

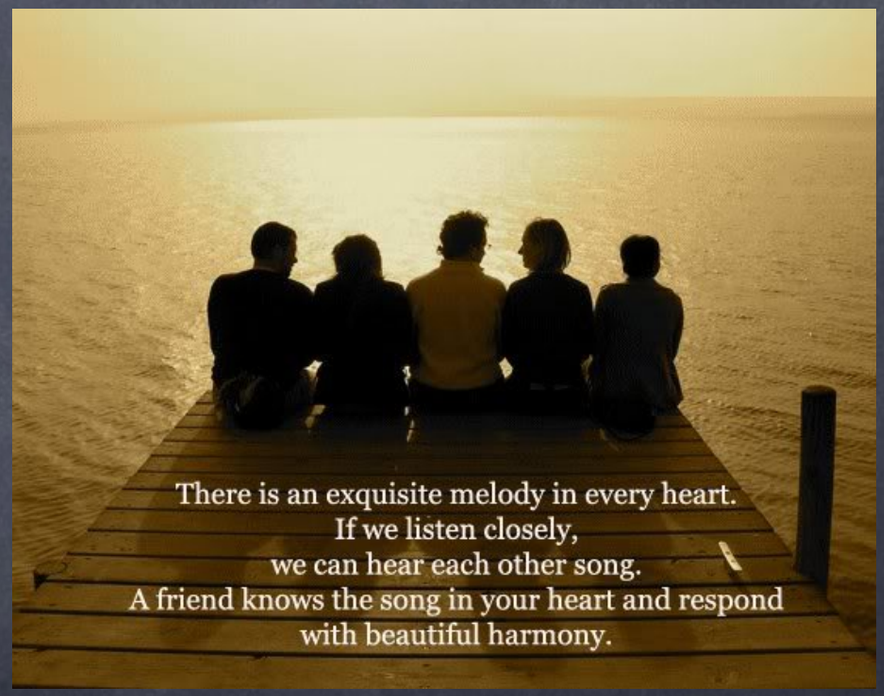
5 Proactive

6 Focus concentrate meditation

Jesse B. Jupiter, MD
Hand and Upper Extremity center
Department of Orthopaedic Surgery, Harvard university
Boston, Massachusetts, USA



“interesting report to surgeons involved in the care of carpal tunnel surgery”



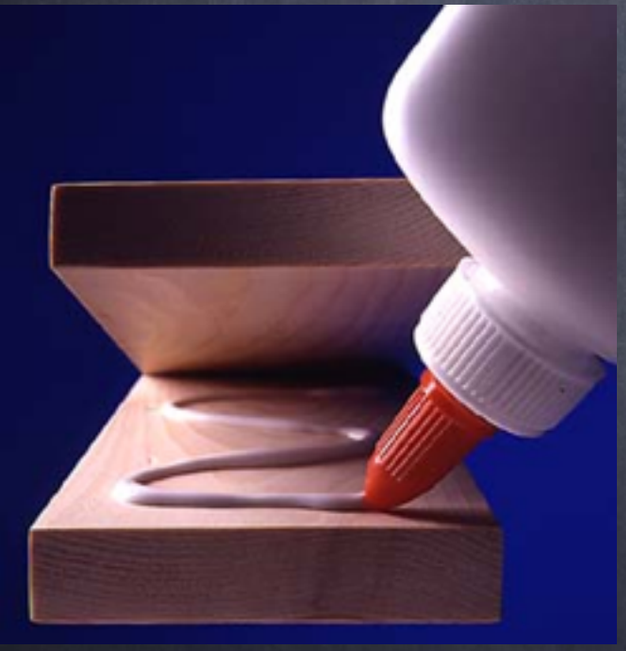
7 Suggestion from mentors and friends

8 Positive thinking

9 Supporter but start from small

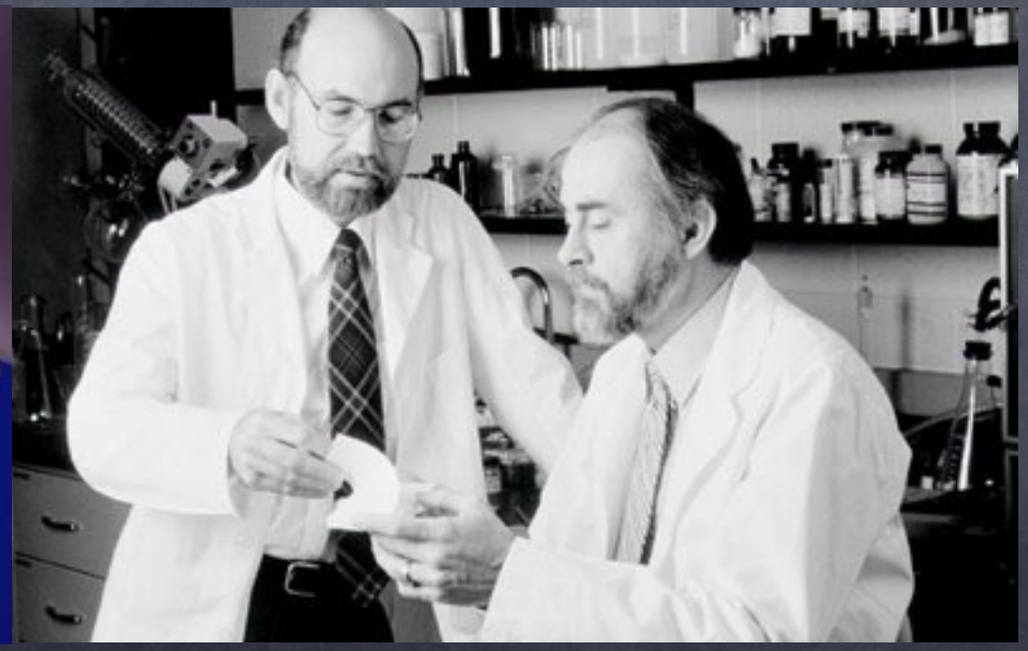
10 Proof & Award

ปัญหา

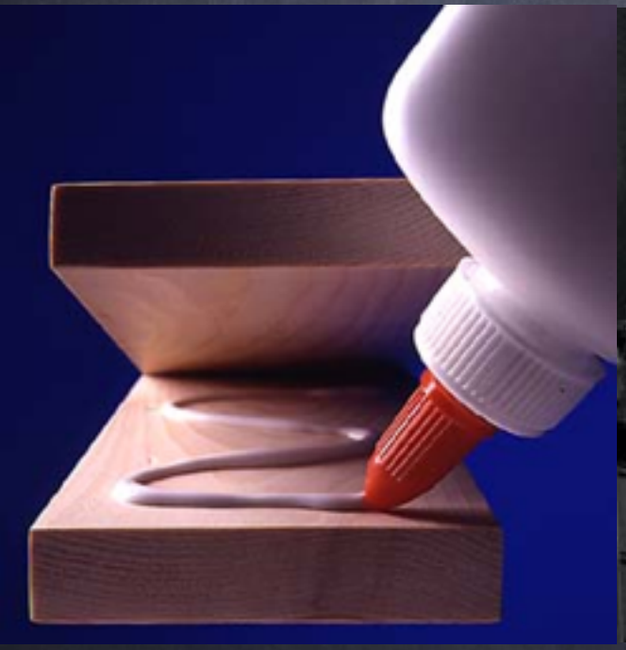


ปัญหา

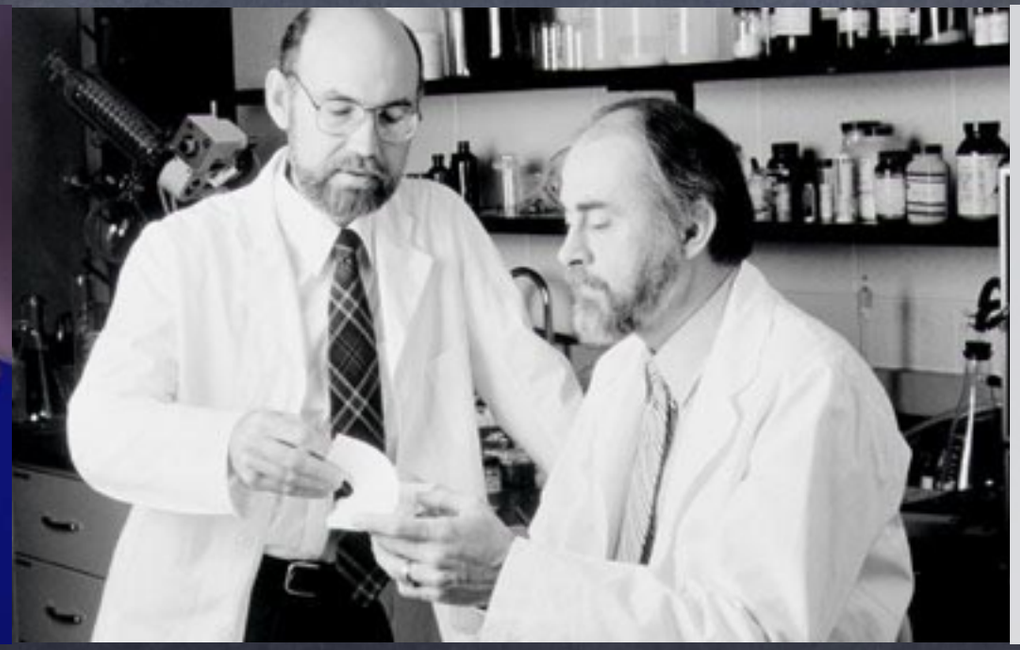
สังเกตุ



ปัญหา



สังเกตุ



innovation

’You know, Justin, you are just small potatoes!”

Zimmer story : Never give up

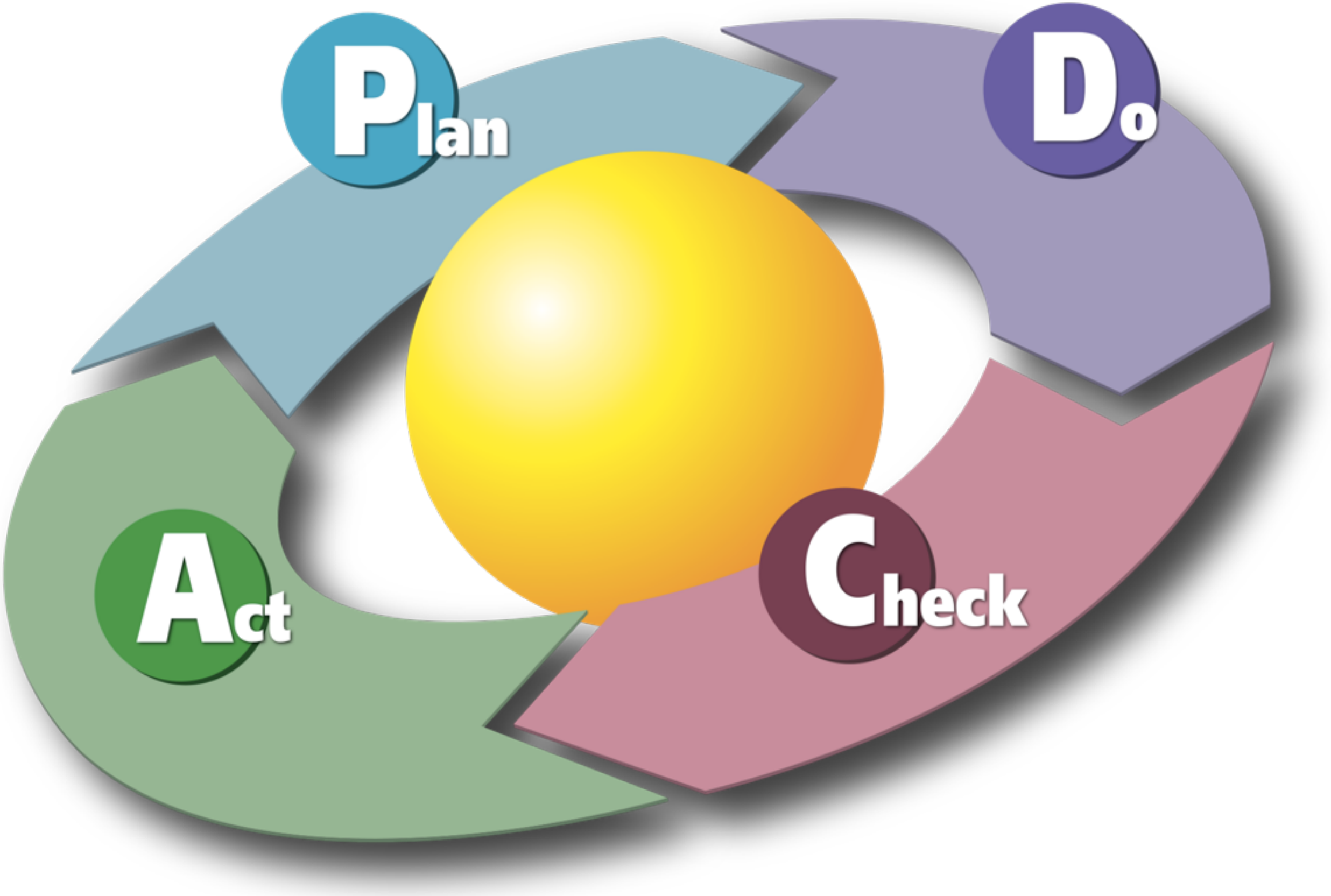
http://www.zimmer-orthopedics.ch/z/ctl/op/global/action/1/id/127/template/CP/navid/7087

How to start

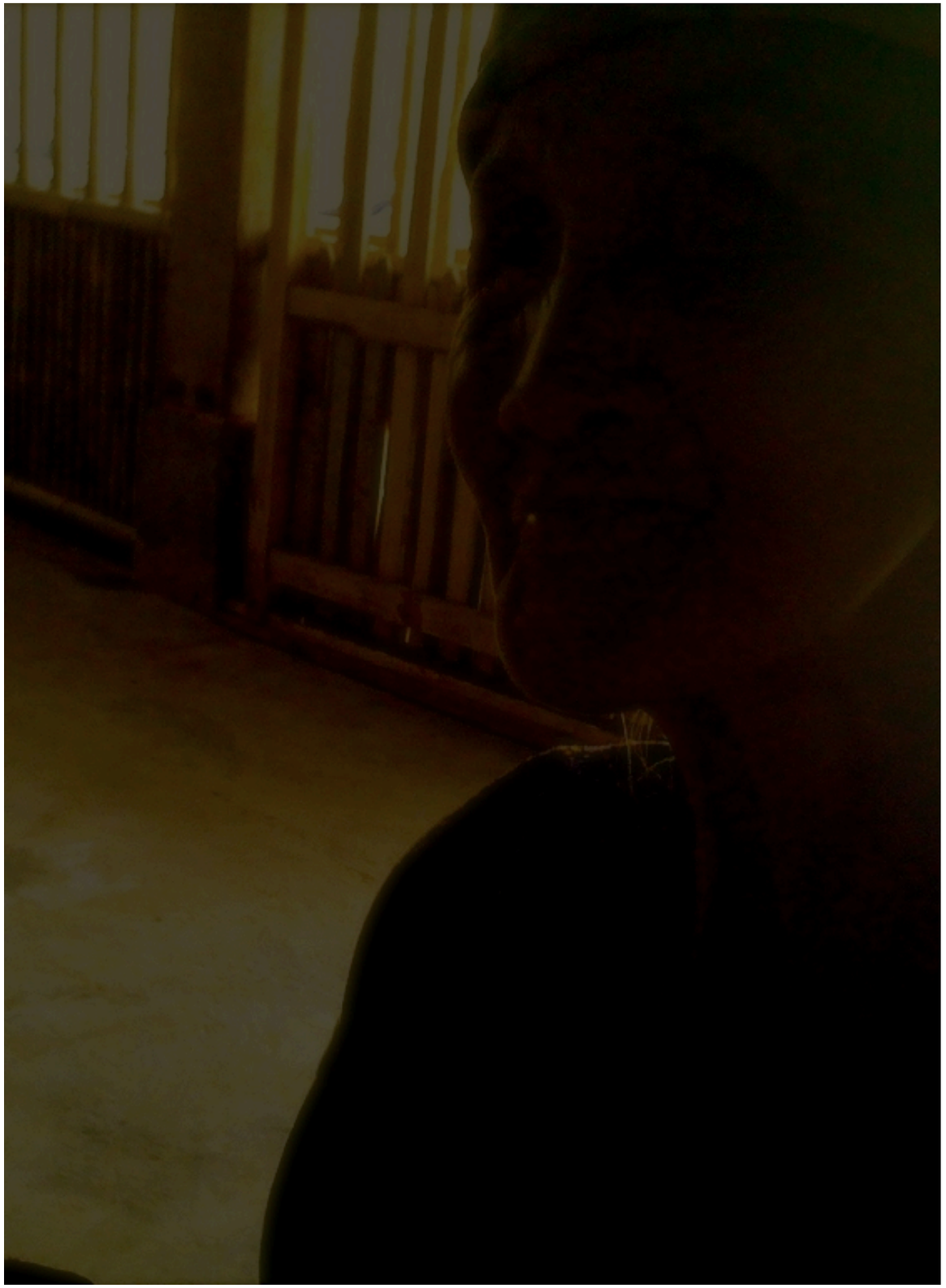
Innovation Start

Medication Errors


DOBU/Tamine
25
mcg/kg/min
Insulin
2
mL/hr
IV Fluid
125
mL/hr


Plan
Do
Check
Act





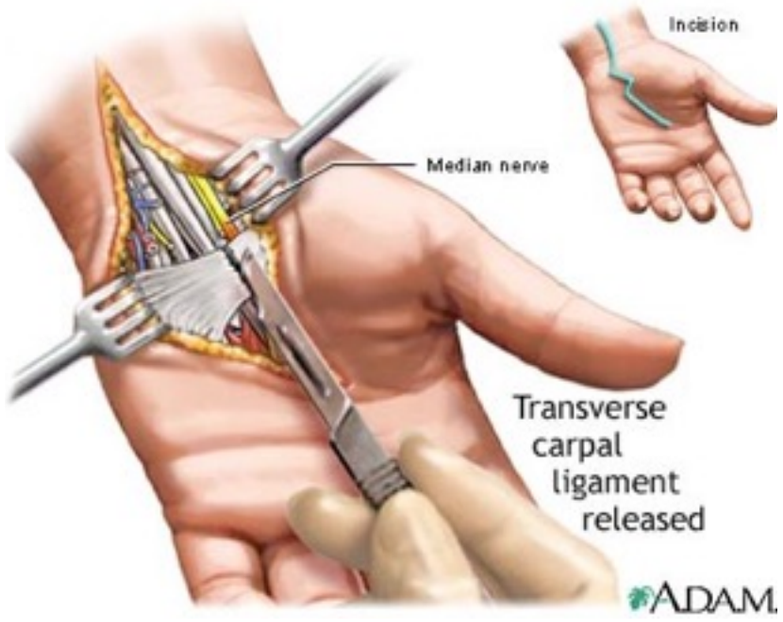

..ใครจะดูถูกเรา
ก็ปล่อยให้เขาดูถูกไป
..แต่จะท่องให้ขึ้นใจ
ว่าเราจะไม่ดูถูกคน

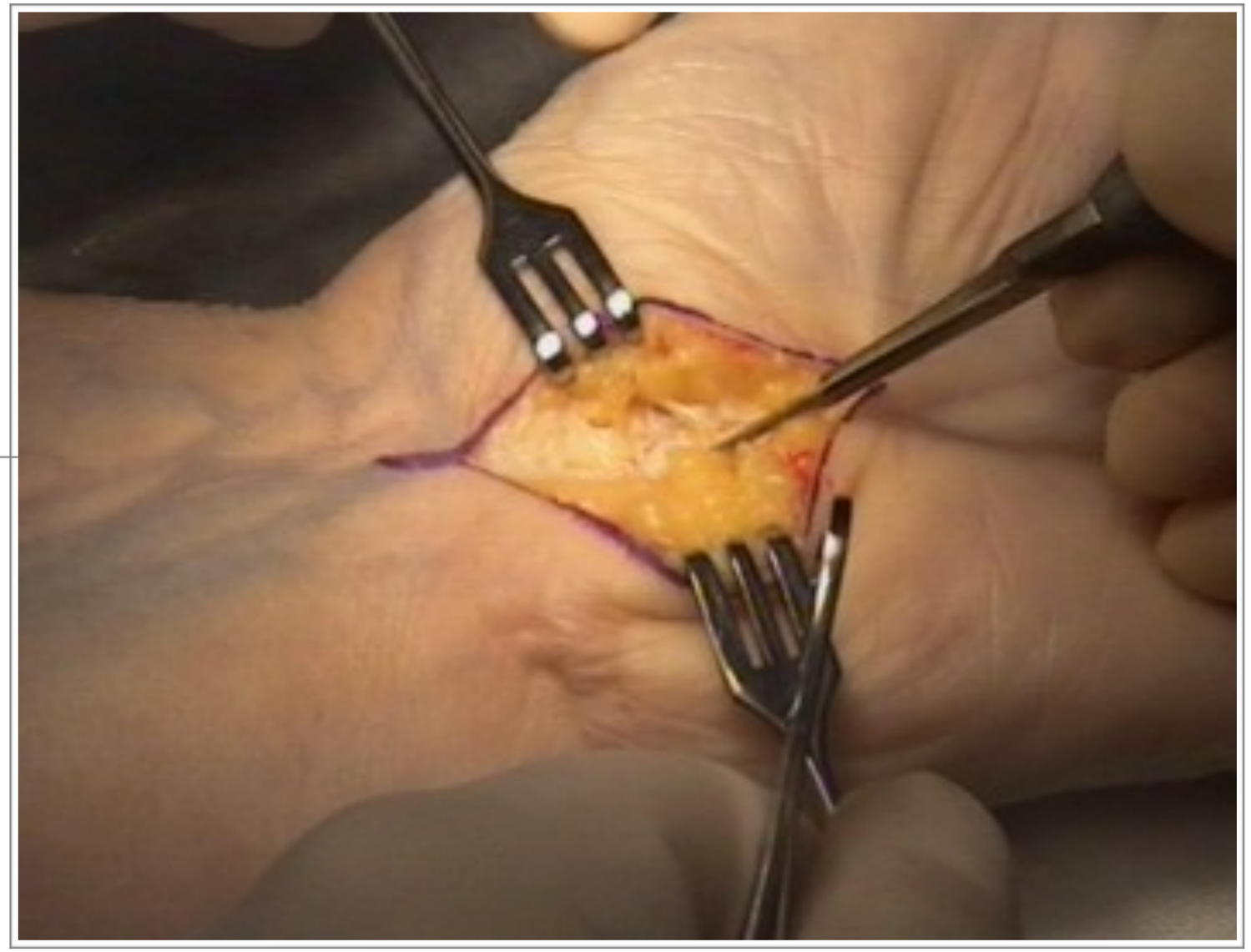
My story

CARPAL TUNNEL SYNDROME

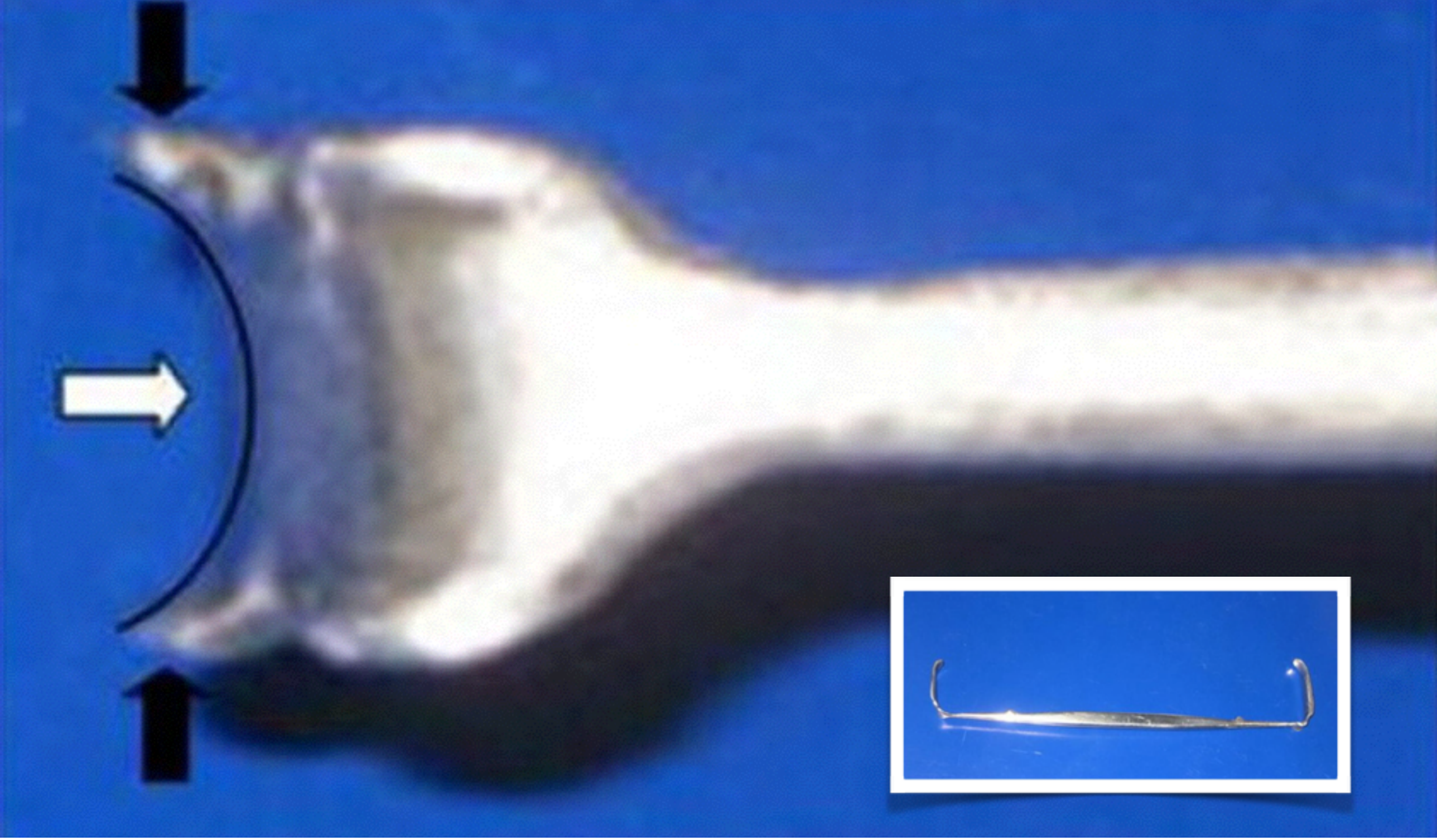
SURGERY:
CARPAL TUNNEL RELEASE

Standard open





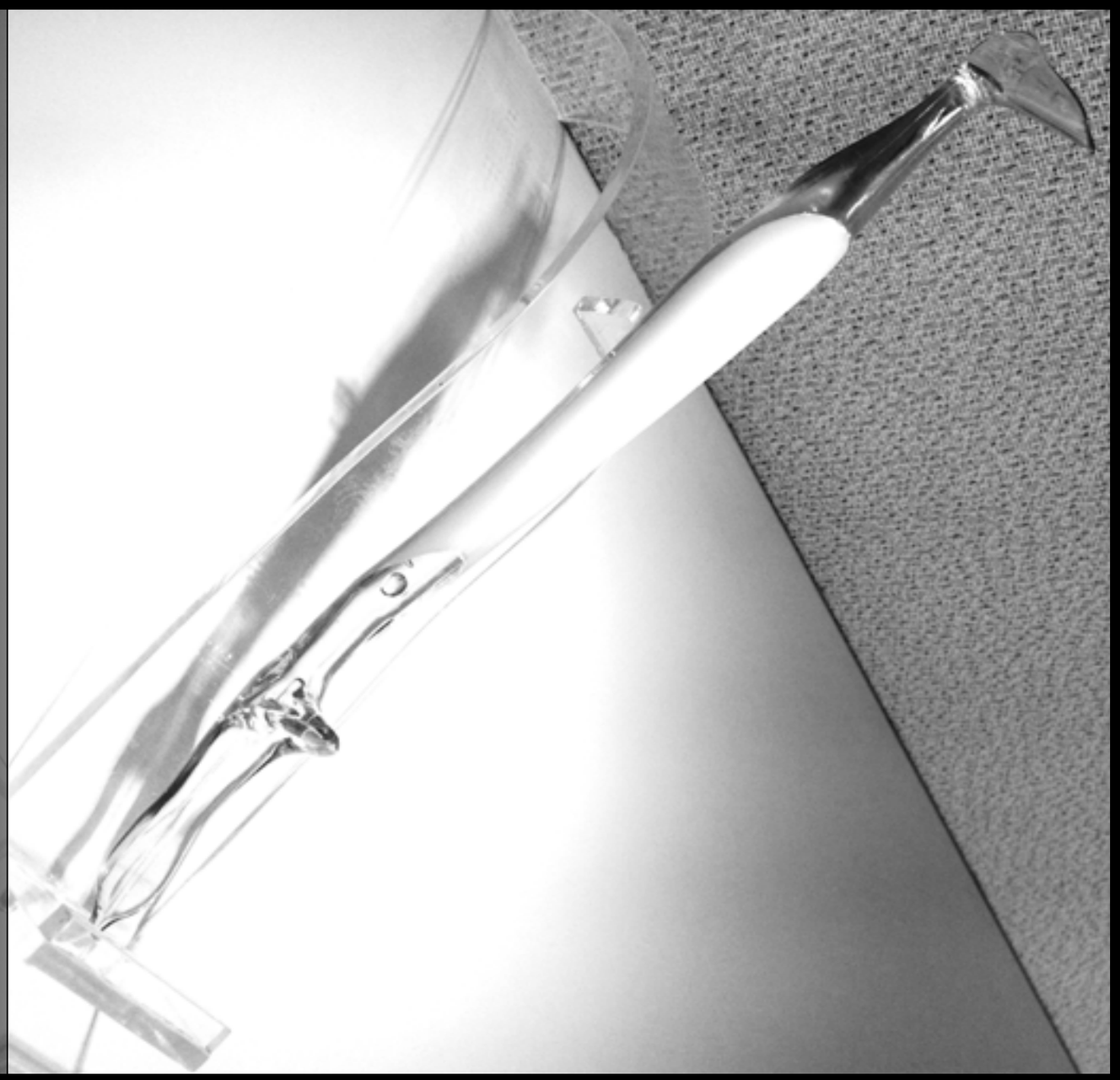
Painful Scar



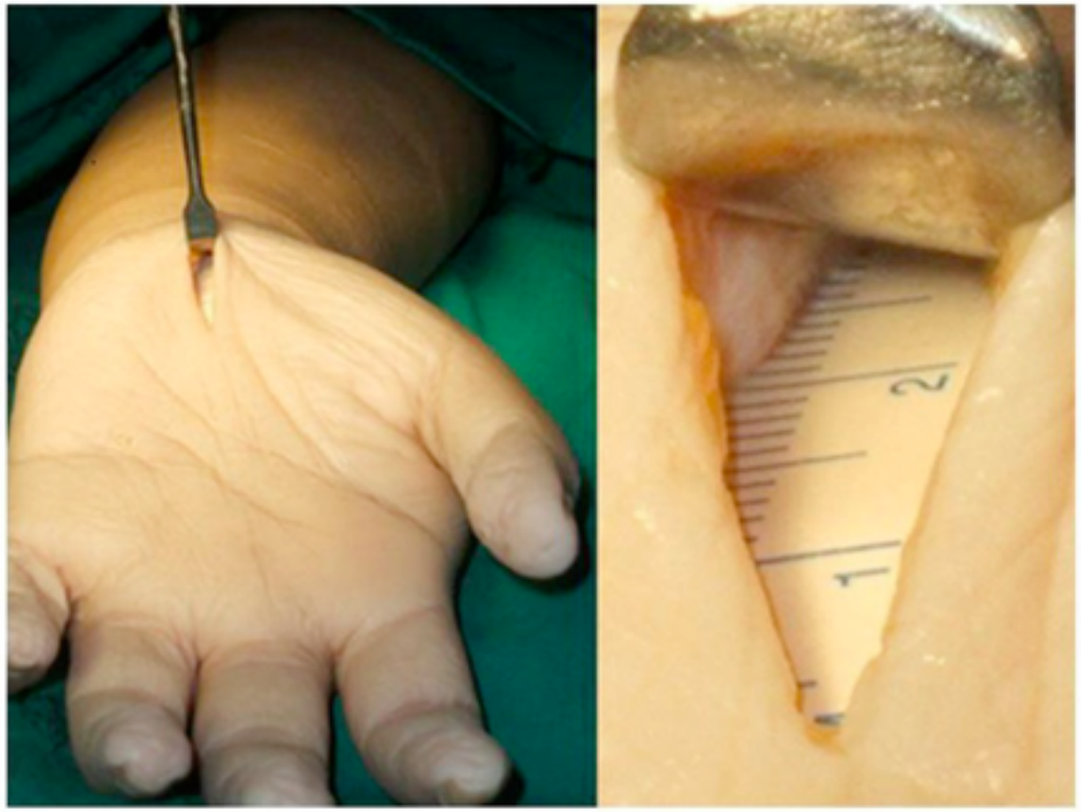
3 First draft prototype

2007 Machine shop

Launch



Visual field 48.7mm



BMC Musculoskeletal Disorders

BioMed Central

Technical advance

Open Access

A new tool for mini-open carpal tunnel release – the PSU retractor

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Abstract

Background: Mini-open carpal tunnel release has become increasingly popular for the treatment of carpal tunnel surgery. The main advantages are shortening recovery time and return-to-work time. However, the risk of neurovascular injury still remains worrisome.

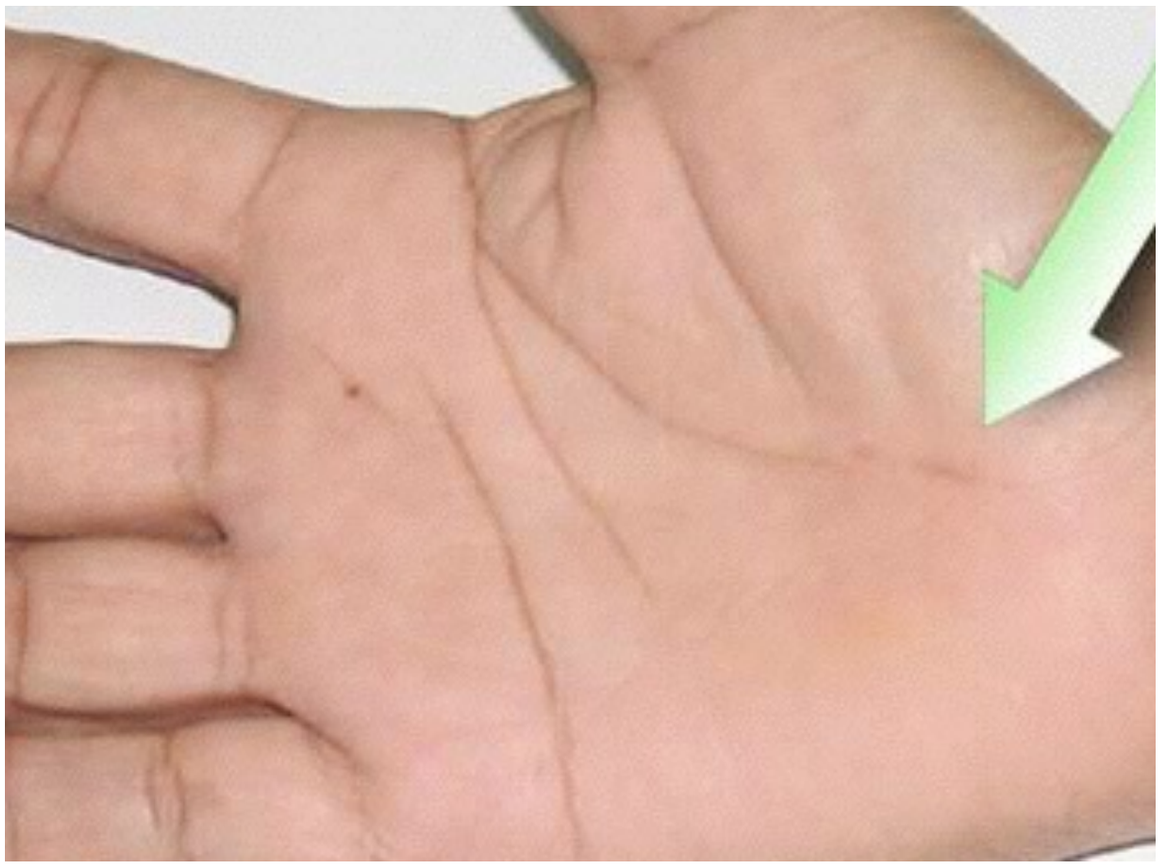
Methods: In this study, we developed a new retractor (herein called the PSU retractor) modified from the widely used Senn retractor, with the aim of decreasing the risk of neurovascular problems from normal procedure. 3-Dimensional computer design software (SolidWorks® Office Premium 2007 SP3.1) was used to construct a 3-D PSU retractor prototype. An amputated arm from a 30-year-old woman diagnosed as synovial sarcoma at the shoulder was used to test the maximal visual length. A mini-surgical incision was performed at 3 cm distal to the transverse wrist crease and a tiny flexible ruler was inserted through the tunnel beneath the skin to measure the maximal visual length.

Results: Our new retractor showed significantly better maximal visual length compared to the Senn retractor (47.7(8.1) mm vs. 39.2(6.5) mm). In addition, most assessors expressed a higher satisfaction rate with the PSU retractor than with the Senn retractor (7.3 (1.9) vs. 6.3 (1.1)).

Conclusion: In conclusion, we have developed a promising new retractor using a computer design program, which appears to be an improvement on the currently available equipment used for mini-open carpal tunnel surgery. However, further clinical studies are needed to confirm our initial findings.

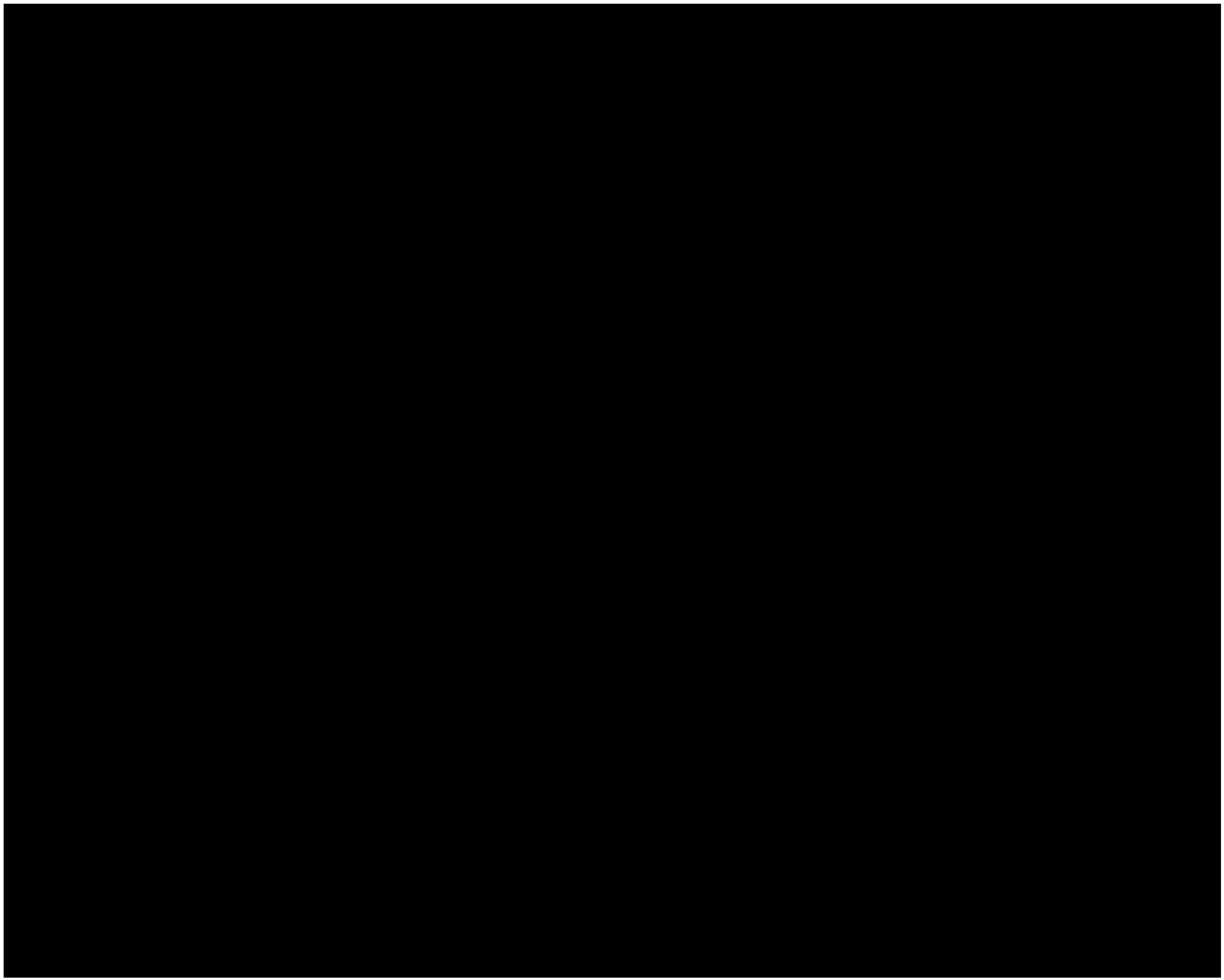
Background

Carpal tunnel syndrome (CTS) is the most common nerve entrapment problem faced by orthopaedists. Surgical treatment is generally recommended in cases which fail to respond to conservative measures. Surgical treatment [1] normally involves cutting the transverse carpal ligament to reduce the carpal tunnel pressure. Open carpal tunnel release (OCTR) remains the accepted standard operation [2], but newer procedures include endoscopic or semi-blind mini-incision techniques are being increasingly performed. Postoperative pain and late recovery are the main drawbacks to OCTR [3-6]. Mini-incision carpal tunnel release using various types of tool such as the Indiana Tome (Biomet, Warsaw, USA), the KnifeLight (Stryker Instruments, Kalamazoo, Michigan, USA) and the "Safe-guard" system (KMI, Inc., San Diego, USA) have recently



NEW PSU-CTR

OLD STANDARD INCISION



New PSU-Carpal tunnel release

2 Days

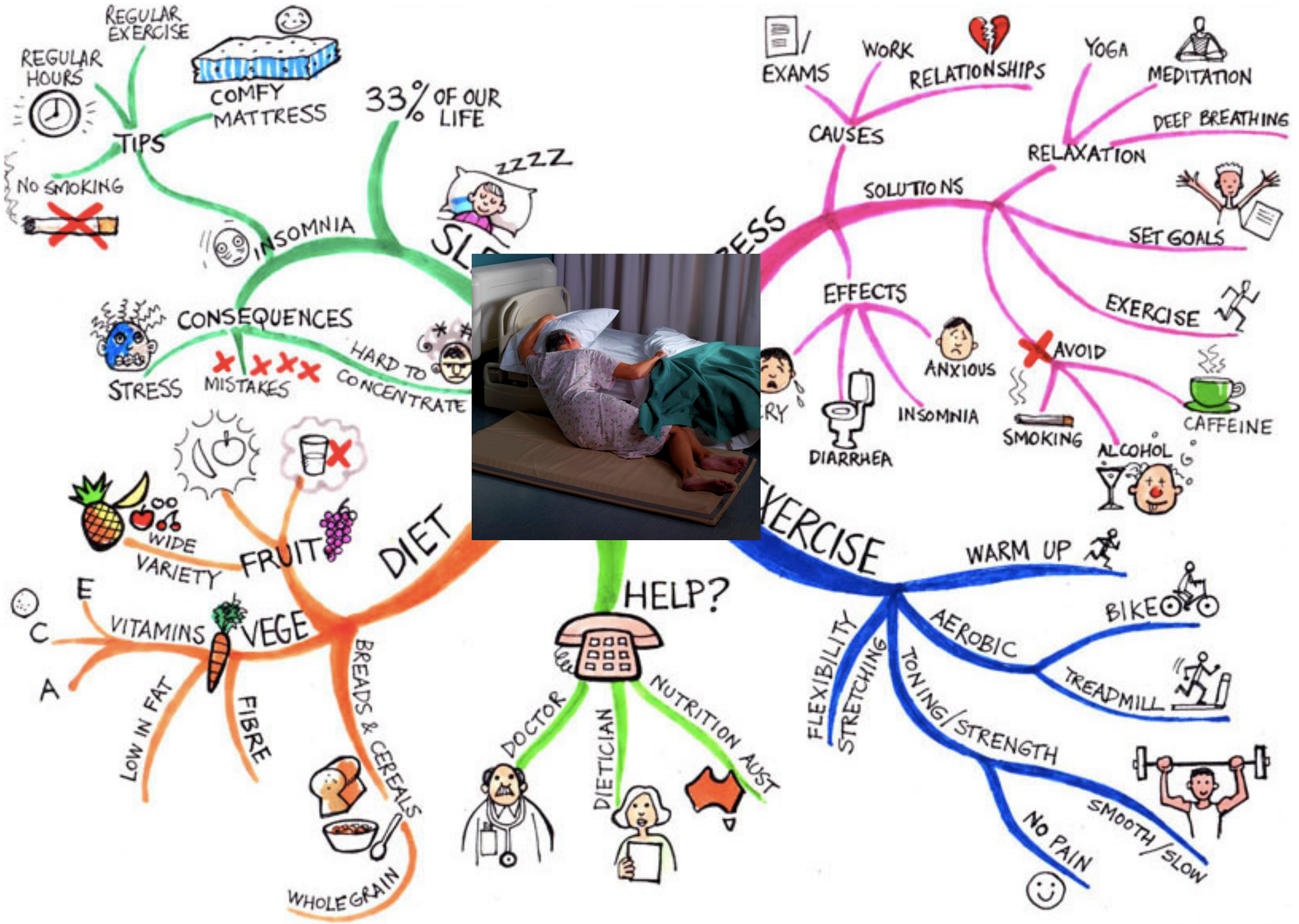
MIS CTR data

	Name	Number	Operativ	wound	Neural	Nerv	Vascul	Painfu	Recu	Incon	Pillar p	Return to work(days)		
	Sunton -PSU	306 (L126,R1	7.5	1.8	0	0	0	2%	0	0	7.6% (c	9.5		
	Sarit-PSU	26(L12,R14)	10	1.8	0	0	0	4% (o	0	0	7.60%	13.5(Open20.8)		
	Vachirapan-PSU	21(L18,R11,E	10	1.8	0	0	0	0	0	0	0	N/V		
	Tavorn-Yala	100	10	2	0	0	0	0	0	0	N/V	N/V		
	Boonlert-Phuket	130	10	2	0	0	0	0	0	0	N/V	N/V	Approximate	
	Karn	21	11	2	0	0	0	0	0	0	5%(sus	10		
	Bundit-Trung	80	N/V	N/V	0	0	0	0	0	0	N/V	N/V		
	Chalermpon-Trung	28(M3,F25)	15	2	0	0	0	0	0	0	0	12.89		
	Tongchai-Bangpakok9	10	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	Approximate	
	Apinan-Songkla	34	12.5	N/V	0	0	0	0	0	0	0	12		
	Verachai-Songkla	28	12.5	N/V	0	0	0	0	0	0	0	12		
	Kanit-CMU	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V		
	Sorasak-Rama	28	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	N/V	Approximate	
	Peerapong-Tungsong	20	16.8(ope	2	0	0	0	0	0	0	5%(1)	6.1(open12)		
	Anuchit-Tungsong	20	N/V	2	0	0	0	0	0	0	0	N/V	Approximate	
	Koravit-Kolok	30	10	1.8	0	0	0	0	0	0	0	10		
Summary CTR	16 Surgeons	882	7.5-16.8	1.8-2	0	0	0	0	0	0	0-7.6%	6.1-13.5		
Open Articles					1.5%	0.2%	0.01%	19-16%			36%			
Endo Articles			28.53		2.20%	0.4%	0%		3.4(2	0.6-6.	34%	22-54	2% failure --> open	

Course & Workshop

3 Models for Innovation course

Workshop 1 : Innovation workshop



Source: www.learningfundamentals.com.au

Rules

คิดบวก เสมอ
ห้าม block ตัวเอง block เพื่อน
ให้คิดว่าทุกอย่างเป็นไปได้
ถูกใจให้ดาว ***
อยากทำงานด้วยให้ชื่อ เบอร์โทร

1 วงตรงกลาง = ปัญหา

2 สร้างกิ่ง ไอเดียแรก

(กลุ่มของปัญหาย่อย
หรือ กลุ่มบุคคลที่เกี่ยวข้อง
หรือ กลุ่มของแนวทางแก้ไข)

3 แตกแขนงมากขึ้น

ถูก ใจ กดไลค์ ให้ดาว

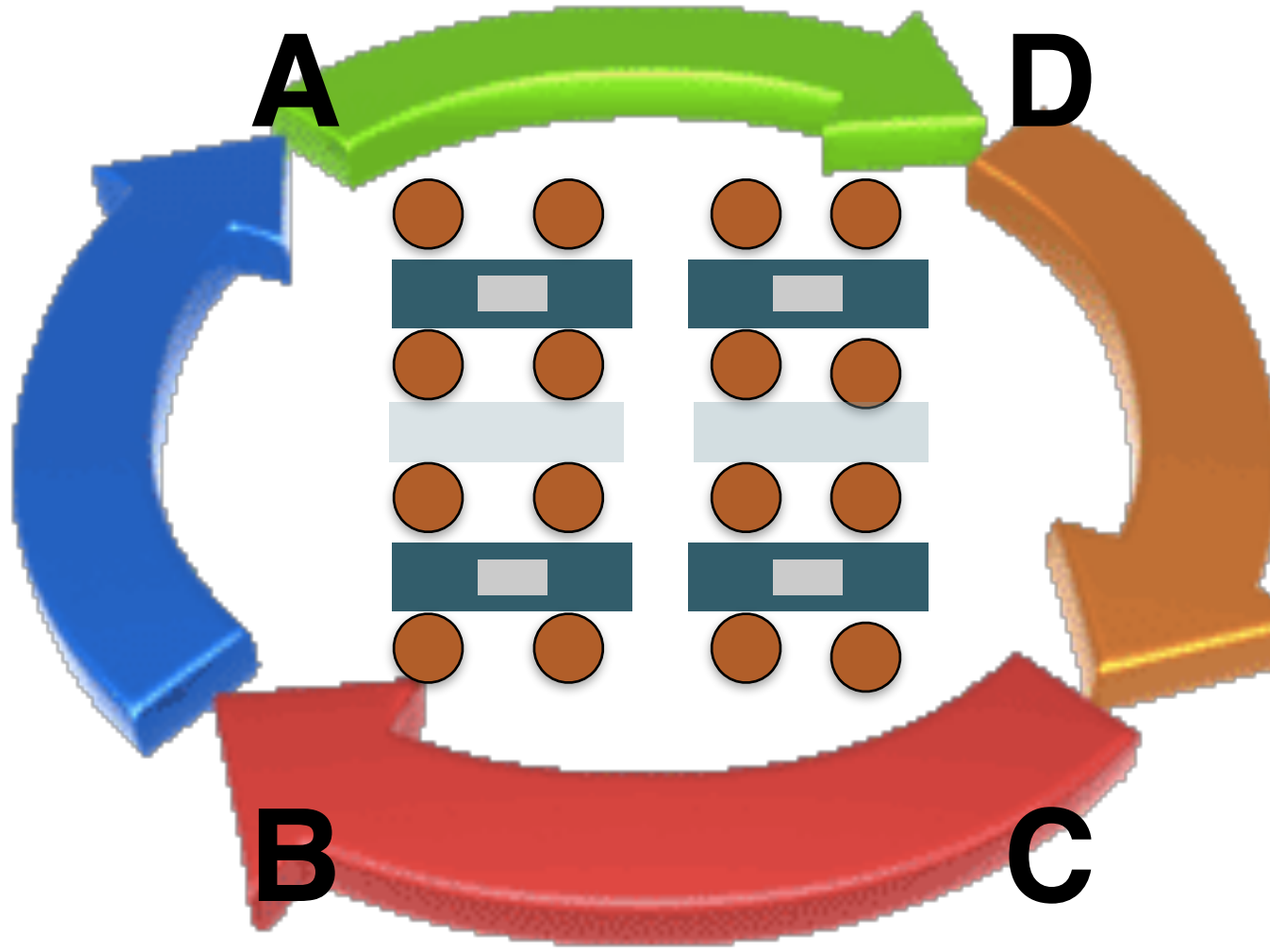
รอบ 1A, 1B =10+10 min

รอบ 2 =10min

รอบ 3 = 8min

รอบ 3 = 5min

กลับมาที่เดิม วิเคราะห์ของดี



ของดี

เลือก ความคิดที่ดี
เลือก อันที่ทำง่าย
แตกแขนง สิ่งที่ต้องทำ



Steve Jobs


6

Workshop 2 : Innovation launch

Focus

Research

Workshop 3 : Innovation success


STRATEGY & PLANNING
LEAD
THINK
PLAN
IDEA
INNOVATE
ASSESS
ANALYZE
PROCESS
ORGANIZE
TRAINING
MATERIALS
ROLL-OUT
Strategic planning

Top 10 Medical Innovations for 2015

Cleveland Clinic Innovations

Home | Stay Connected:

About Us | Inventor | Investor | Partner | Summit

Summit > Top 10 Medical Innovations > Top 10 for 2015

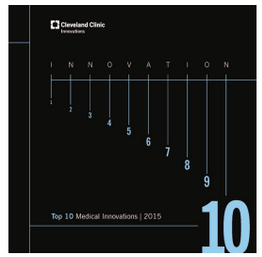
Past Summits

New Ventures Healthcare Challenge

Top 10 Medical Innovations

- Top 10 for 2016
- Top 10 for 2015
- Top 10 for 2014
- Top 10 for 2013
- Top 10 for 2012
- Top 10 for 2011
- Top 10 for 2010
- Top 10 for 2009
- Top 10 for 2008
- Top 10 for 2007

Top 10 Medical Innovations for 2015



Which are the up-and-coming technologies and which will have the biggest impact on healthcare in 2015?

Cleveland Clinic's culture of innovation naturally fosters a good deal of discussion about new "game changing" technologies and which ones will have the greatest impact each year. The passion of our clinicians and researchers for getting the best care for patients drives a continuous dialogue on what state-of-the art medical technologies are just over the horizon.

This book was developed to share outside Cleveland Clinic what our clinical leaders are saying to each other and what innovations they feel will help shape healthcare over the next 12 months.

Overview | Where Are They Now?

#1 Mobile Stroke Treatment Unit

Each year in the United States, nearly 800,000 people suffer a stroke, or a brain attack. This occurs when an artery that supplies blood to part of the brain becomes blocked or ruptures and leads to bleeding in the brain. In ischemic strokes, a blood clot is the triggering event, while the remaining 10 percent of strokes are called hemorrhagic and a burst blood vessel or aneurysm is typically the cause.

Read More

Watch the Video

Overview | Where Are They Now?

#2 Dengue Vaccine

All it takes is one bite: Dengue is a debilitating virus that's transmitted to humans by the bite of an *Aedes aegypti* mosquito that has previously bitten a person infected with the dengue virus.

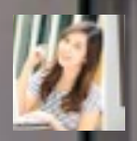
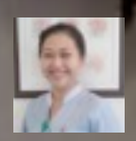
Read more.

Watch the Video

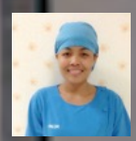
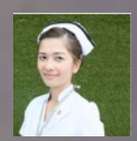
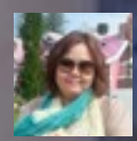
Overview | Where Are They Now?

Innovation Center





Showcase