



# L.I.F.E

Adding LIFE to your practice



GSL Dental College & Hospital

# L.I.F.E

*Lasers*

*Implants*

*Facial esthetics*

*Endodontics*

1



# LASERS

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# LASERS

- Laser dentistry can improve the precision of your treatment while minimizing pain, treatment time and recovery time.
- Laser based practice has become mainstream now a days.
- Patients are also getting aware about this mode of treatment. Some of them insist on getting Laser treatments.

# Why us?

- Successfully running under graduate laser program from past few years .
- The applications of laser in different clinical scenarios are taught in this course.
- Participants can work on patients using lasers.



# Module-1

- ✓ Introduction.
- ✓ Laser physics.
- ✓ Emission modes and types of lasers.
- ✓ Laser wavelengths in dentistry and their applications .
- ✓ Types of lasers.
- ✓ Laser-tissue interaction.
- ✓ Photobiomodulation (low level laser therapy)
- ✓ Laser safety.
- ✓ Hands-on on tomatoes and chicken leg
- ✓ Each participant should do minimum one minor periodontal surgical procedure using laser.

# Module 2

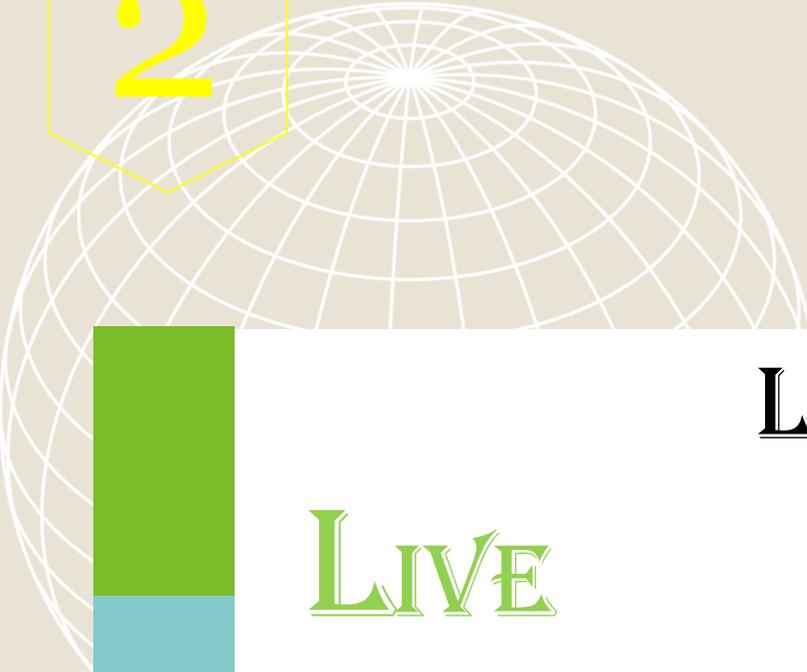
- Laser use in hard-tissue management
- Optimal laser wavelengths and power parameters relative to absorption phenomena in oral hard tissue
- Laser interaction with dental caries, enamel, dentine, cementum
- Laser-assisted restorative therapy
- Practical session: laser-hard tissue interaction and its application on extracted teeth

# Learning Outcomes

- By the end of the course participants should:
- have improved their core knowledge in laser use in dentistry and refined their practical skills
- have an understanding of laser physics, emission modes, and how different laser wavelengths interact with various target tissues in order to deliver the optimal outcome
- have an understanding of the advantages of laser applications in dentistry in comparison to the conventional methods
- have an understanding of the health and safety regulations in using laser in your daily practice



2



LIT



LIVE

IMPLANT

TRAINING

where theory becomes reality!!!



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## INTRODUCTION

- ✓ GSL Dental College and Hospital proudly announces Implantology Fellowship Program in association with ICOI
- ✓ The only college with a recognized center in AP and Telangana that is in memorandum of understanding (MOU) with International Congress of Oral Implantology (ICOI)





## WHAT IS ICOI???



The International Congress of Oral Implantologists is a tax-exempt, non-profit professional association that renders education, holds seminars and meetings, and encourages research work regarding Implantology.

# Why Us?

TEACHER TO  
STUDENT RATIO 1:1



# WHY US???

✓ WE HAVE AN INHOUSE CBCT WITH A FULL FACE F.O.V (16X14.5) WHERE PARTICIPANTS CAN EXPOSE & PRACTICE EVALUATION ON NUMBER OF CBCTs





VIRTUAL DISSECTION



S.M.A.R.T LAB

## Why Us?

Simulation Module for Advanced And Research based Training (**SMART**) lab equipped to undergo “Basics of Anaesthesia Surgery and Intensive care in Clinical Scenario” (**B.A.S.I.C.S**) for better preparedness of patient handling.

# WHY US???

- ✓ Individual Styrofoam jaws provided to each participant for hands on programme in order to gain precision, control and perfection.



# WHY US???

- ✓ Already successfully running an Implantology programme for the last 3 years in which each intern is trained to place two implants before completion of internship



# WHY US???

- ✓ OT etiquette for better understanding of :
  - Infection control
  - Quality communication
  - Personal hygiene



- ✓ We also provide the student to learn
- ✓ Circulatory pathways and vascular access
- ✓ Suturing techniques



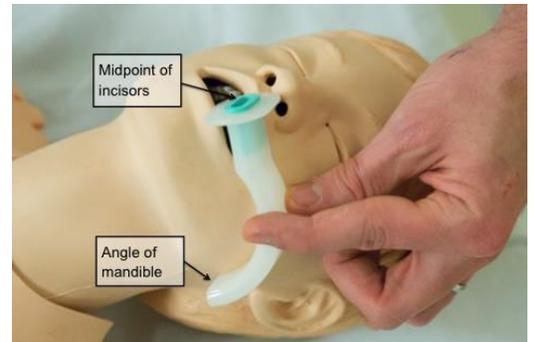
# 3D PRINTING

- ✓ Hands-on workshop on 3D printing and its relevance in precision of implant placement on patients.



# BASIC LIFE SUPPORT

- ✓ We also teach the student about basic life support, haemostatic agents and medical emergencies which is helpful for the student in any kind of emergency situation in dental set up
- ✓ Basic Life Support Includes :
  - Cardio Pulmonary Resuscitation
  - Airway Management





# COURSES AVAILABLE

- 05 IMPLANT PROGRAMME
- 10 IMPLANT PROGRAMME
- 10 IMPLANT ADVANCED COURSE \*

## \*ADVANCED COURSE INCLUDES

- ✓ BONE GRAFTING
- ✓ PLATELET RICH FIBRIN (PRF)
- ✓ RIDGE SPLIT
- ✓ OSSEODENSIFICATION
- ✓ SINUS LIFT
- ✓ GUIDED BONE REGENERATION (GBR)

# COMPREHENSIVE PROGRAMME SCHEDULE

## ■ 1<sup>st</sup> MODULE : INTRODUCTION & LECTURES

### ❖ DAY 1 :

- Scope of Oral Implantology
- Armamentarium
- Basic bone anatomy
- Systemic conditions in Implantology

### ❖ DAY 2:

- Soft tissue biotypes
- Diagnosis and treatment planning
- Types of Implants & Implant selection
- Drilling protocol

- 2<sup>ND</sup> MODULE : PRE-SURGICAL PHASE

- CBCT evaluation
- Hands-on on Styrofoam jaws

- 3<sup>RD</sup> MODULE : PATIENT SELECTION & EVALUATION

- Selection of patient
- Diagnostic impressions
- CBCT
- Sterilization protocols

## ■ 4th MODULE : SURGICAL PHASE I

- Evaluating systemic health of the patient
- Delivery of local anaesthesia
- Isolation protocol
- Live demonstration of implant placement on patient

## ■ 5<sup>th</sup> MODULE : SURGICAL PHASE II

### ❖ LECTURE :

- Types of healing abutment
- Emergence profile
- Correlation b/w Gingival Biotype & Healing abutment

## ■ 6<sup>th</sup> MODULE: PRE PROSTHETIC PHASE

- Implant prosthesis
- Impression making
- Selection of abutments
- Demonstration of impression

## ■ 7<sup>th</sup> MODULE:

- Lecture on implant occlusion
- Cementation/screwing of prosthesis
- Implant failure & complications



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**F.A.C.I.A.L**

**FACIAL AESTHETIC  
COURSE INCLUDING  
AUGUMENTATION &  
LASERS**

# FACIAL AESTHETICS

**Facial Aesthetics** is an unprecedented boom in India, with an increasingly growing number of people in demand of aesthetic care and a consequent need for trained practitioners.

**Facial Aesthetics** involves the use of safe and minimally invasive techniques to bring back the pleasant appearance of your **face** quickly and painlessly.

The main objective is to give you a more pleasant and youthful overall look.

# Who can practice ...?

➤ DERMATOLOGIST

➤ MAXILLOFACIAL  
SURGEONS

➤ PLASTIC SURGEONS

➤ GENERAL  
SURGEONS

➤ MBBS

➤ BDS

➤ Any other medical  
professionals.

WHO ARE

PRACTISING..

❖ BDS

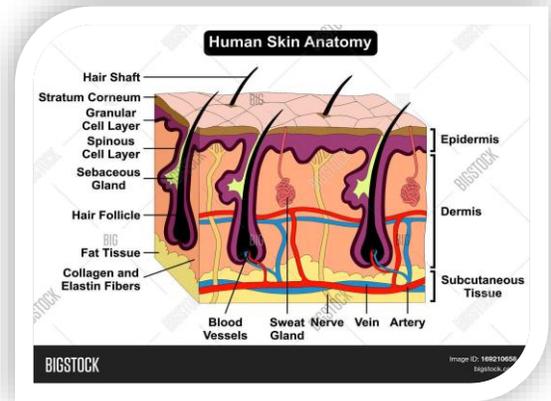
❖ MDS

❖ DERMATOLOGISTS.

## NON SURGICAL Courses/workshops

- ✓ FELLOWSHIP IN MEDICAL COSMETOLOGY (FMC)
- ✓ PG DIPLOMA IN CLINICAL COSMETOLOGY (PGDCC)
- ✓ PG DIPLOMA IN MEDICAL TRICHOLOGY (PGDMT)
- ✓ FELLOWSHIP IN AESTHETIC & ANTI-AGING MEDICINE (FAAM)
- ✓ FELLOWSHIP IN AESTHETIC MEDICINE (FAM)
- ✓ DIPLOMA IN AESTHETIC LASER MEDICINE (DALM)

# SURGICAL WORKSHOPS



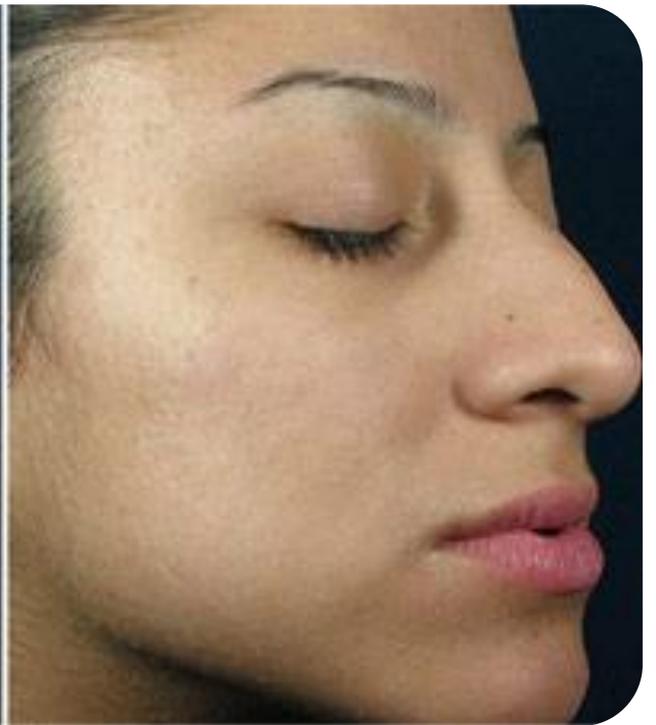
- MASTERS COURSE IN HAIR TRANSPLANTATION (MCHT)
- MASTER COURSE IN BLEPHAROPLASTY.
- MASTER COURSE IN DIMPLE CREATION.
- MASTER COURSE IN FACIAL FAT GRAFTING.
- MASTER COURSE IN VITILIGO SURGERIES.
- SURGICAL NOSE CORRECTIONS.
- MASTER COURSE IN EAR LOBE REPAIR.

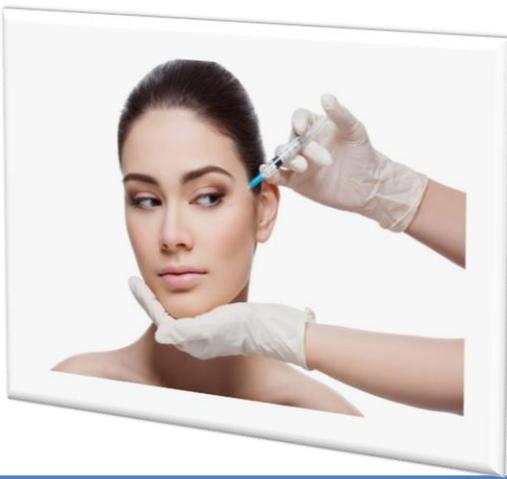
# **NON SURGICAL TREATMENTS**

# CHEMICAL PEELS...

- **Chemical peels** are usually performed in a cosmetic surgeon's office, either by the cosmetic surgeon or a specially trained aesthetician or nurse.
- During treatment, a solution is brushed or swabbed onto your skin, where it will be left for a certain period of time. Over the days following treatment, the affected layers of skin will gradually peel away, revealing a smoother, younger-looking complexion.

- Reduce or remove age spots, blotchiness, or discoloration
- Smooth fine lines & wrinkles on the skin's surface
- Minimize or remove acne scars or milder scars from injury or surgery
- Tighten & tone the skin and brighten the complexion
- Remove keratoses or precancerous growths.

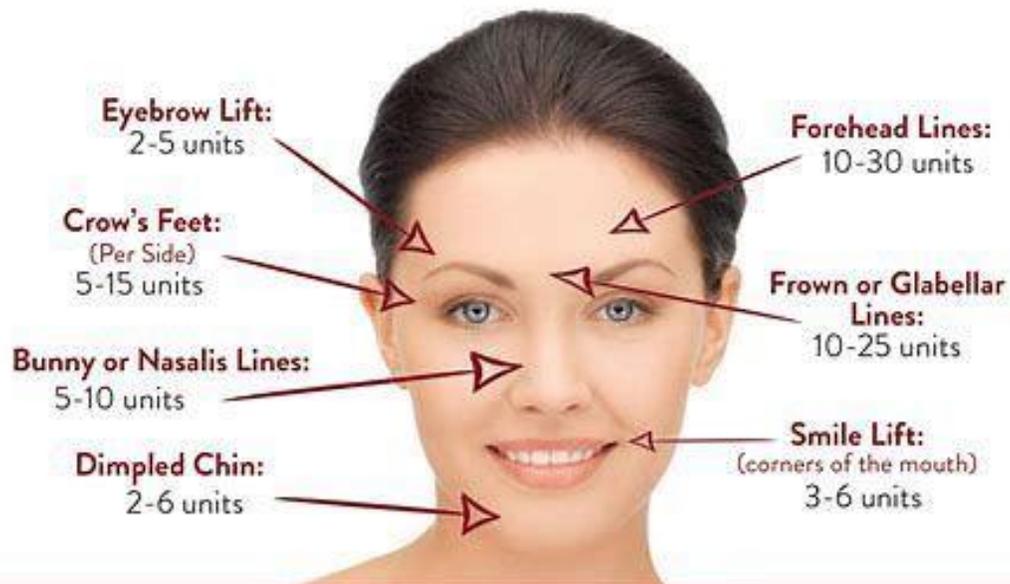




# BOTOX

- Botulinum toxin is best known to clinicians as a deadly poison produced by the *Clostridium botulinum* bacterium.
- Currently, the Food and Drug Administration (FDA) has approved **botulinum toxin A** for several indications, including blepharospasm, strabismus, cervical dystonia, chronic migraines, axillary hyperhidrosis, upper limb spasticity, wrinkles on face, urinary incontinence, and the aesthetic improvement of glabellar rhytides.

## How Much Botox Will I Need?



UtahFacialPlastics.com

UtahFacialPlastics.com

2-6 units  
Dimpled Chin:

3-6 units  
(corners of the mouth)

- Microdermabrasion & Dermabrasion
- Microneedling
- IPL (Intense Pulsed Light)

# Laser Skin Resurfacing Treatments



# INDICATIONS

- Lasers use highly concentrated beams of light energy to improve the skin's tone, texture and appearance.
- Minimize fine lines or wrinkles
- Treat brown spots, redness or discoloration for more balanced skin tone
- Tighten skin and encourage collagen production
- Remove acne or surgical scars
- Remove unwanted facial or body hair



Before



After

# MICRODERMABRASION & DERMABRASION

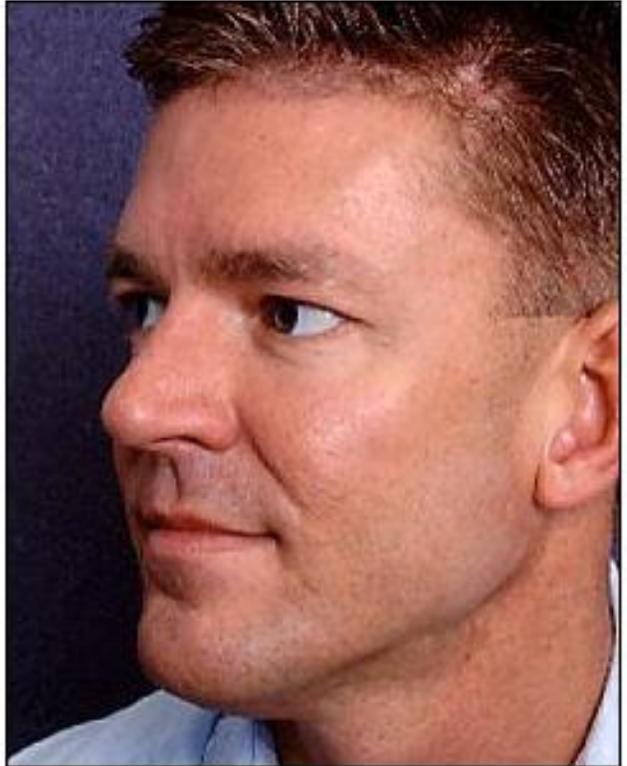


# INDICATIONS OF MICROABRASION

- During treatment, the area is exfoliated by using a very fine tipped instrument or by applying a fine mist of abrasive particles.
- Minimize fine lines & wrinkles, such as crow's feet
- Help skincare products work more effectively
- Brighten skin & improve tone
- Reduce age spots or mild acne scars

# DERMABRASION INDICATION

- Minimize vertical lip lines, smile lines, or other facial wrinkles
- Remove acne scars and other blemishes
- Smooth the skin and balance complexion
- Dermabrasion is a more powerful mechanical resurfacing technique than microdermabrasion



# MICRONEEDLING

- Microneedling is a skin resurfacing technology that uses the skin's natural healing process to reduce skin imperfections, treat sun damage, and restore a smoother, clearer complexion.
- Instead of removing layers of skin with heat or chemicals, microneedling creates microscopic "injuries" in the skin using an instrument containing dozens of very fine, short needles.
- The "injuries" are not visible to the naked eye, but they do trigger the natural healing response, prompting your skin to produce new collagen and elastin and regenerate new, healthy skin cells.

# INDICATIONS OF MICRONEEDLING

- Fine lines & wrinkles
- Acne or surgical scars
- Large pore size
- Sun damage, age spots and hyper-pigmentation
- Stretch marks
- Rough patches & texture problems



*after*



*before*

***MICRONEEDLING***

# IPL (Intense Pulsed Light)



- IPL uses a broad spectrum of light wavelengths, delivered in brief pulses. This light helps the skin in two ways.
- First, the wavelengths in IPL absorb excessive pigment in the skin (reds and browns) to restore a more even complexion.
- To a lesser degree, IPL stimulates collagen production to improve overall skin tone.

## What skin concerns can IPL treat?

- Sun damage
- Hyper- pigmentation
- Age spots & freckles
- Spider veins
- Redness & rosacea
- Vascular lesions
- Texture problems
- Fine lines







# DERMA FILLERS...

- **Dermal fillers**, sometimes called soft tissue **fillers**, are substances designed to be injected beneath the surface of the skin to add volume and fullness.

Substances used in **dermal fillers** include:

- **Hyaluronic acid**, which is found in some fluids and tissues in the body that add plumpness to the skin.

# INDICATIONS

- Dermal Fillers for Frown Lines
- Dermal Fillers for Under Eyes (Tear Trough)
- Dermal Fillers for Volume Augmentation of Cheeks
- Dermal Fillers for Volume Augmentation of Lips
- Dermal Fillers for Mentolabial Folds

## Dermal Fillers According to Treatment Areas

MEDICA  
DEPOT

### Mid-face

Juvéderm Voluma<sup>®</sup>,  
Belotero Volume<sup>®</sup>,  
Restylane Lyft<sup>®</sup>,  
Teosyal Ultra Deep<sup>®</sup>  
& Teosyal Ultimate<sup>®</sup>.

### Fine Lines & Lips

Juvéderm Volbella<sup>®</sup>, Teosyal RHA 2<sup>®</sup>,  
Restylane Kysse<sup>®</sup>, Restylane Refyne<sup>®</sup>,  
Teosyal Global Action<sup>®</sup>,  
& Belotero Balance<sup>®</sup>.

### Lower Face

Juvéderm Volift<sup>®</sup>, Restylane Refyne<sup>®</sup>,  
Belotero Intense<sup>®</sup>, Teosyal RHA 3<sup>®</sup>,  
& Teosyal Global Action<sup>®</sup>.

### Nose & Chin

Belotero Volume<sup>®</sup>, Restylane Lyft<sup>®</sup>,  
Juvéderm Voluma<sup>®</sup>,  
& Teosyal Ultimate<sup>®</sup>.

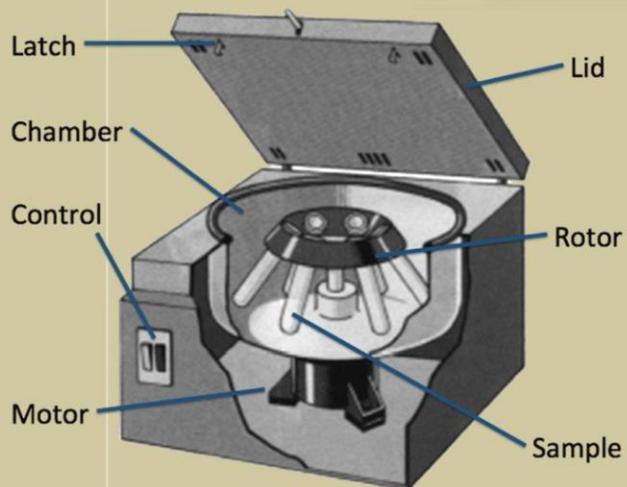


# PRP ( PLATELET RICH PLASMA)

- **PRP (platelet-rich plasma)** therapy for **hair loss** is a three-step medical treatment in which a person's blood is drawn, processed, and then injected into the scalp.
- Use of PRP in hair Restoration therapy
- Use of PRP in skin Rejuvenation treatment.



## Parts of the Centrifuge



**DOES IT  
WORK?**

**PLATELET-RICH PLASMA (PRP)**

Sp Adobe Spark  
2b Adobe Spark

PLATELET-RICH PLASMA (PRP)

# GLUTATHIONE ( SKIN LIGHTENING TREATMENT)



- **Glutathione** is an antioxidant naturally found in human cells that neutralizes free radicals, boosts the immune system and detoxifies the body.
- It can also cause **skin lightening** by converting melanin to a lighter colour and deactivating the enzyme tyrosinase, which helps produce the pigment.

# FACE LIFT SURGERY(SURGICAL)

- Facelift surgery lifts and firms sagging facial tissues to restore a more naturally youthful facial appearance. It is often said that having a facelift works to “turn back the clock,” helping a patient look like a younger version of him or herself.
- By removing excess, sagging skin, smoothing deep folds, and lifting and tightening the deep facial tissues, a facelift surgery can help a patient look not just younger, but simply “better.”



AMERICAN BOARD  
OF COSMETIC SURGERY

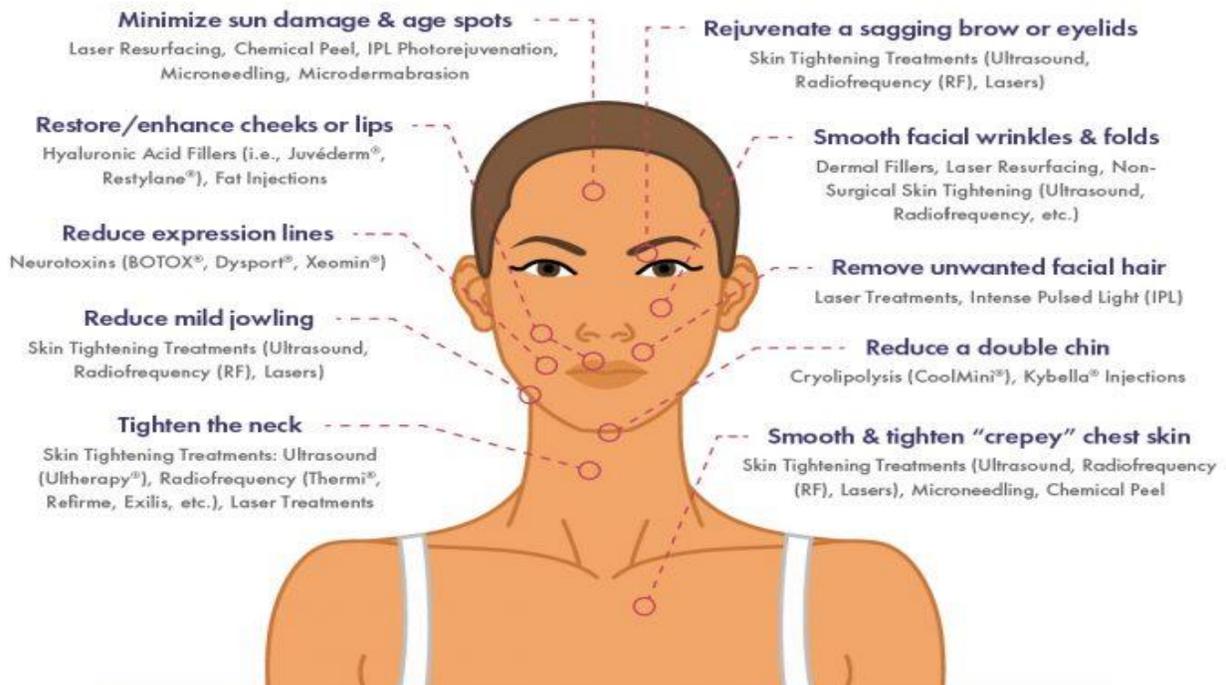
# GUIDE TO Non-Surgical Facial Rejuvenation



## Quick facts about non-surgical facial rejuvenation

- » Options to smooth wrinkles, restore volume, tighten sagging skin, improve skin tone & texture, minimize scars, treat sun damage & more
- » Less dramatic results than surgery, but little to no downtime
- » Most treatments are done in-office in 90 minutes or less
- » Results are typically temporary and last 3 months to 1 year or longer, depending on treatment

## How can non-surgical treatments improve my face & skin?



## WHEN IS FACIAL COSMETIC SURGERY A BETTER OPTION?

- » You have significant jowling, sagging skin, or volume loss to address
- » You prefer to undergo a procedure only once to achieve your final results
- » You desire a more permanent solution (cosmetic surgery can last for years)
- » You would like to reshape the nose, jawline or other facial features

*For informational purposes only. Not meant to diagnose, treat or cure any condition.  
Consult with a board certified cosmetic surgeon before undergoing any cosmetic procedure.*

# conclusion...

- No matter what the procedure, it is always recommended to take the prior case history, necessary investigations, consent and has to be done under the supervision of an experienced professional.

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# CLINICAL ENDODONTICS

## FROM BASICS TO ROTARY



# ROTARY ENDODONTICS



Rotary instrumentation has revolutionized the art & science of endodontics practice in the last decade with predictable success.

Recent advances in nickel titanium (NiTi) metallurgy have enhanced the gold standard of rotary designs to achieve the third dimension of canal shaping which can be practice more efficiently under magnification.

This lecture coupled with hands-on highlights the following topics with a mission to achieve successful endo therapy:-

## Topics enlightened

- Endodontic diagnosis & treatment planning
- Access for success orifice location and enhancement
- Working length determination & root canal patency
- Biomechanical preparation of root canal system
- Irrigation dynamics
- Master cone selection & obturation techniques

# DAY1

## LECTURES:

- Preoperative Assessment / Diagnosis
- LA Modifications, prior To Access Opening

### **Access Opening:**

Locating Orifice/Extra Canals

Patency, Orifice Enhancement Using  
Rotary/Hand

- Methods Of Working Length Determination
- Glide Path-rotary & Manual

## **DAY1**

### **DEMO & HANDS ON (PHANTOM HEAD & EXTRACTED NATURAL TEETH)**

- Access opening/extra canals
- Working length, orifice enhancement/glide path

### **MICROSCOPIC EVALUATION:**

- Microscopic assessment of access opening and orifice of participants by faculty

## DAY2

### LECTURES:

Cleaning and shaping

Basic principle

- Hand and rotary instrument
- Rotary systems available in the market an overview
- Role of Irrigants and intra canal medicaments (which when and why)
- Master cone selection and obturation

## **DAY2**

### **DEMO AND HANDS ON (PHANTOM HEAD AND EXTRACTED NATURAL TEETH)**

- Basic hand filing
- Basic rotary system (Protaper)
- Master cone selection & obturation

## DAY2

### LECTURES:

- Trouble shooting
- Single vs multiple visit endo
- Perforation-prevention & repair.
- Separated instruments and management techniques
- Post endodontic pain
- Retreatment-techniques and steps
- Calcified canals, ledge, varying canal morphologies etc.

## **DAY3**

# **LIVE DEMONSTRATION OF RCT ON PATIENT**

## **LECTURES:**

- Selection of cases for post & core management
- Types of metal and composites (FRC ) posts
- Post prep, Try in, Cementation and Core build-up

## **DAY3**

### **DEMO & HAND ON (PHANTOM HEAD & EXTRACTED NATURAL TEETH)**

- Tooth Preparation & Post Space Preparation
- Techniques For Fabrication Of Custom Cast Post & Core (direct & Indirect)
- Cementation Of FRC Post & Co Rebuild-up

# ESTHETIC COMPOSITE RESTORATIONS

- I. Basics Of Composite Restoration & Bonding
- II. Case Selection For –
  - a) Class III
  - b) Class IV
  - c) Diastema Closure
  - d) Veneers
  - e) Full Tooth Reconstruction
- III. Shade Selection
- IV. Artistic Elements In Direct Composite Restoration
- V. Tooth Preparations

## VI. Techniques For Anterior Direct Composite Restorations

### A. Putty Method

1. Mock Up For Veneer/Diastema Closure
2. Single & Multi Layer (Anatomical Layering)  
Technique Using Putty Index

### B. Contour Strip / Direct Method

## VII. Finishing & Polishing Of Composite Restorations