

**2.3.5 – The Teaching Learning process of the
Institution nurtures creativity, analytical skills and
innovation among students**

x



PRIYADARSHINI
DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

S.NO	DESCRIPTION	ACTIVITY / TEACHING AND LEARNING PROCESS
1.	ANALYTICAL	<ul style="list-style-type: none">• STS PROJECTS 2023• STS PROJECTS 2022
2.	INNOVATION	<ul style="list-style-type: none">• CHARTS• POSTERS
3.	CREATIVITY	<ul style="list-style-type: none">• PROJECT MODELS

Principal
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**



PRIYADARSHINI
DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

ICMR STS RESEARCH PROJECTS 2023

S.NO	NAME	REFERENCE ID	YEAR	DEPARTMENT	GUIDE
1.	M. Akshaya	2023-14292	Final Year	Periodontics	Dr. Vasanth Ayswarya
2.	R. Ilakkiya	2023-11083	Final Year	Periodontics	Dr. I. Paavai
3.	K. Akeerthana	2023-11287	Final Year	Periodontics	Dr. T. Abirami
4.	N. Sri Aravindha	2023-10075	Final Year	Orthodontics	Dr. Ashok Pothuri
5.	U. Ubayana	2023-10841	Final Year	Public Health Dentistry	Dr. B. Selvamani
6.	M. Jegan	2023-14931	Final Year	Oral Surgery	Dr. G. Vijayalakshmi
7.	S. Varshayni	2023-09678	Third Year	Prosthodontics	Dr. K. Sheela Kumari
8.	R. Udhaya Kumar	2023-14483	Final Year	Oral Medicine	Dr. Pavani Muddepalli
9.	S. Seema Afra	2023-14603	Third Year	Conservative Dentistry	Dr. G. Sree Vidya
10.	K.P. Preethi	2023-14830	Final Year	Oral Surgery	Dr. S. Loganathan

ICMR STS RESEARCH PROJECTS 2022

S.NO	NAME	REFERENCE ID	YEAR	DEPARTMENT	GUIDE
1.	R. Naveen Gokul	2022-09658	Final Year	Conservative Dentistry	Dr. A. Jaya Senthil
2.	Kalla Kinda Mokshitha	2022-11661	Final Year	Orthodontics	Dr. C. Vijayadith

Handwritten signature
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631203.
THIRUVALLUR TK & DIST. TAMILNADU

Managed by Indira Education and Charitable Trust

Regd. Off: No. 19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur - 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**

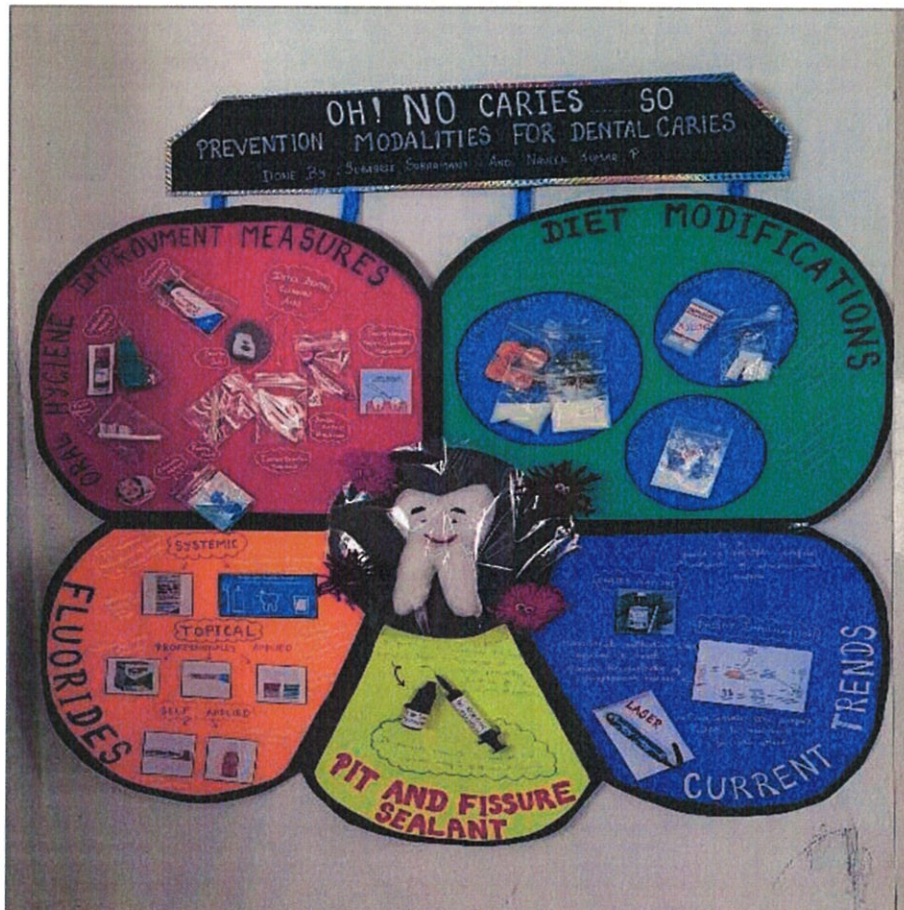


PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

CHARTS

CARIES AWARENESS



#sivithan
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur - 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

TOOTH WHITENING CHART

PYROCATALYSIS - A Safe Non-destructive Tooth Whitening Strategy DONE BY AKSHAYA-M PRIYA BHARATHI

Tooth discoloration - common aesthetic Problem-as it jeopardises Peoples appearance and self confidence

Conventional tooth Whitening Procedure - BLEACHING

Bleaching agents

- Hydrogen Peroxide
- Carbamide Peroxide
- Sodium Peroxide

Generates Superoxides → Breaks conjugated double bonds of Organic pigments → Degrades large staining macromolecules into linear compounds

SIDE EFFECTS

- Tooth Sensitivity
- mineral loss
- Gingival irritation

Therefore, an alternative Non Destructive tooth whitening method - **PYROCATALYSIS**

pyroelectric material with spontaneous electric polarisation employed as **CATALYSTS**

- have the ability to generate electric charges in response to **TEMPERATURE CHANGES** i.e. cold foods, hot foods.
- generation of **ROS (Reactive Oxygen Species)** in response to external stimuli **TEMPERATURE CHANGES**

Principle: when pyroelectric material is poled, the **INTERNAL FERROELECTRIC DOMAINS** are arranged in an ordinal state.

Heterogenous charge developed on the surface of the material (screening charge)

When the pyroelectric material

- COOLED → orderly arrangement of ferroelectric domains-randomized
- HEATED →

PRACTICAL APPLICATION

Braces containing pyroelectric particles embedded in a hydrogel

PYROCATALYSIS achieved through temperature changes

Generated active radicals attaches to stains

Degradation of coloured macromolecules to colourless molecules

Results in **TOOTH WHITENING**

Diagrammatic Representation:

- Initial state: Disordered ferroelectric domains.
- Poling: External electric field aligns domains.
- Heating: Thermal energy randomizes domains, generating charges.
- Whitening: Generated ROS (OH⁻, O₂⁻) attacks stains, breaking down pigments.
- Final state: Clean tooth surface, whitening achieved.

PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No. 19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No. 1, V.G.R Gardens, V.G.R Nagar, Pandur - 631203. Thiruvallur.

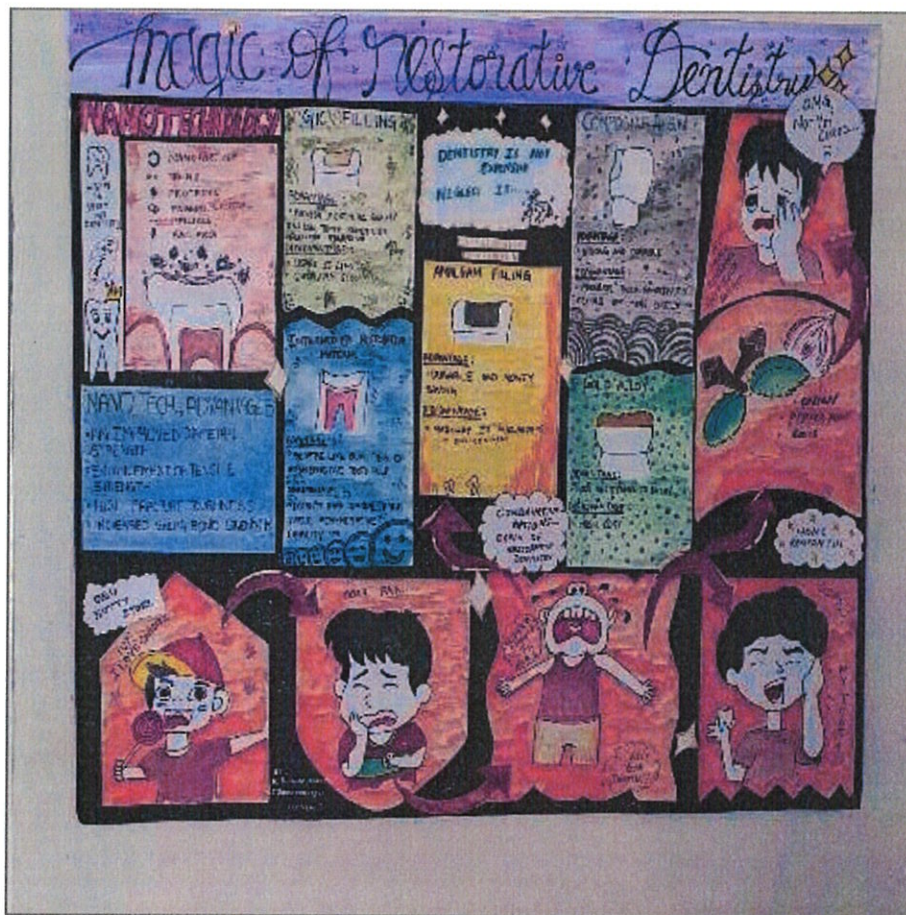
Tel: 044-2765 0160 / 16 Mobile: 98417 35858. PDCH.IN



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

RESTORATION AWARENESS CHART



PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR, TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. PDCH.IN



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

POSTERS

DENTURE MAINTAINANCE POSTER

MAINTENANCE OF ACRYLIC DENTURES
செயற்கை பல் செட்டிளி பராமரிப்பு

- 1) Select a glass or plastic cup with lid that will easily accommodate your dentures.
தமிழகம் உடல்நலத்துறை அமைச்சர், சென்னை
செயற்கை பல், செட்டிளி பல், செட்டிளி பல் (பல்)
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
- 2) Fill the glass with a mixture of white vinegar and distilled water, half of each leaving an inch of space at the top.
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
- 3) Add 3 tbsps. of baking soda to the vinegar/water solution. This will cause the vinegar to fizz. Wait for the fizzing to come to an end.
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
- 4) Place your dentures in the solution and soak for 15 minutes to loosen any stubborn debris of material which may be contributing to the discoloration.
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
- 5) Dip a soft toothbrush into the solution to gently scrub the dentures. Baking soda is both mildly abrasive and a natural bleaching agent.
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
- 6) Rinse the dentures under warm, running water and wash with liquid soap to remove any remaining cleaning solution.
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
- 7) Repeat as many times as necessary, until the dentures are restored to their original colour.
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்
செட்டிளி பல், செட்டிளி பல், செட்டிளி பல்

Quoted by: **Dr. Vijay Valkunth, M.D.S. H.O.D.** **Dr. Venkat Prasath, M.D.S.**
Presented by: **Priyanka, C.S., Priyanka, K., Rajeshree, R., Ranya, S.,
Ranyathilagam, R. (Batch 2009-14)**

#si-#th#
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

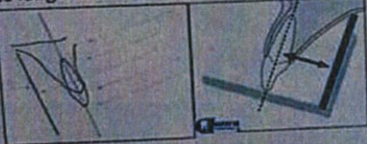
RADIOGRAPHIC TECHNIQUE

PARALLELING RADIOGRAPHIC TECHNIQUE

- Intra oral radiographic technique.
- Also called Extension Cone Paralleling Technique, Right Angle technique, Long Cone Technique.

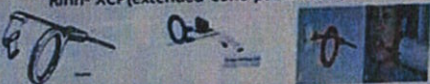
HISTORY: Invented by Dr. Franklin Mc Cormack in 1920.

TECHNIQUE :
Film is placed in mouth parallel to the long axis of the tooth and the central x-ray beam directed to or at right angles to the film and to long axis of tooth




ADVANTAGES:
Errors due to improper placement of the film are minimized and the magnification of image is negligible or not there at all.

SPECIAL HOLDERS USED:
Rinn- XCP (extended cone parallelism)



POSITION INDICATING DEVICES:



DISADVANTAGES:
Cannot be performed in edentulous patients, in patients with shallow floor of mouth and shallow palate.

PRESENTED BY: AYESHA, B.S.NIKITHA, PATHAN SANA, AMULYA, PINAZ. (2007 BATCH)
GUIDED BY: Dr. Sridhar (M.D.S), Dr. karthika. (M.D.S)

Handwritten signature
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU.

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur - 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. PDCH.IN



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

PEDIATRIC ACCESS PREPARATION

DEPARTMENT OF PEDODONTICS
ACCESS CAVITY DESIGNS

Unobstructed access cavity (UAC) are prepared by obtaining straight line access into the coronal and middle third of root canal system.

Cooperative access cavity (CAC) minimizing the tooth structure to be removed hence increasing the amount of original tooth structure.

Single access cavity (SAC) is an access to complete a root canal that is very small.

Trans access cavity (TAC) in which separate cavities are prepared to approach the mesial and distal canal systems in a mandibular molar.

Minimally invasive access cavity designs present more risk than benefit in the outcome of endodontic treatment.

PRESENTED BY: AKSHITA, RAJUL B.M, REHANA BANU S, RAJESHWARI (2017-2022 BATCH)

Indira Education and Charitable Trust
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**

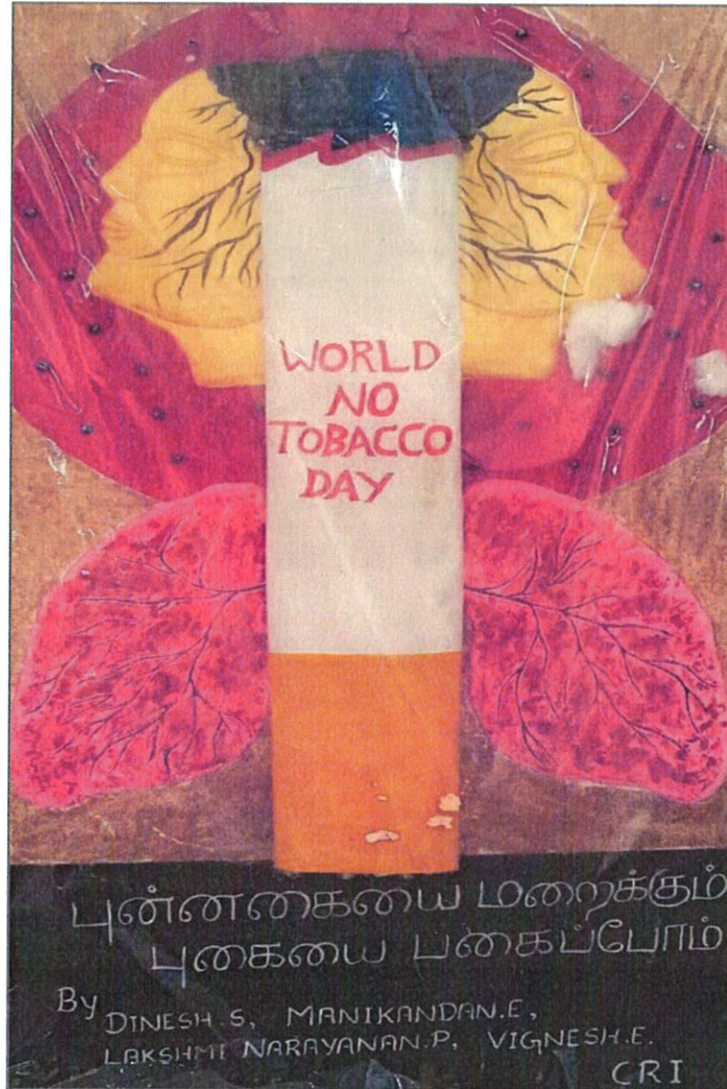


PRIYADARSHINI
DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

MODEL PROJECTS

TOBACCO AWARENESS



Handwritten signature in green ink.

PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.

Managed by Indira Education and Charitable Trust
THIRUVALLUR, TAMIL NADU

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur - 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. PDCH.IN



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

SCHEMATIC CAVITY PREPARATION



Dr. Jithan
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

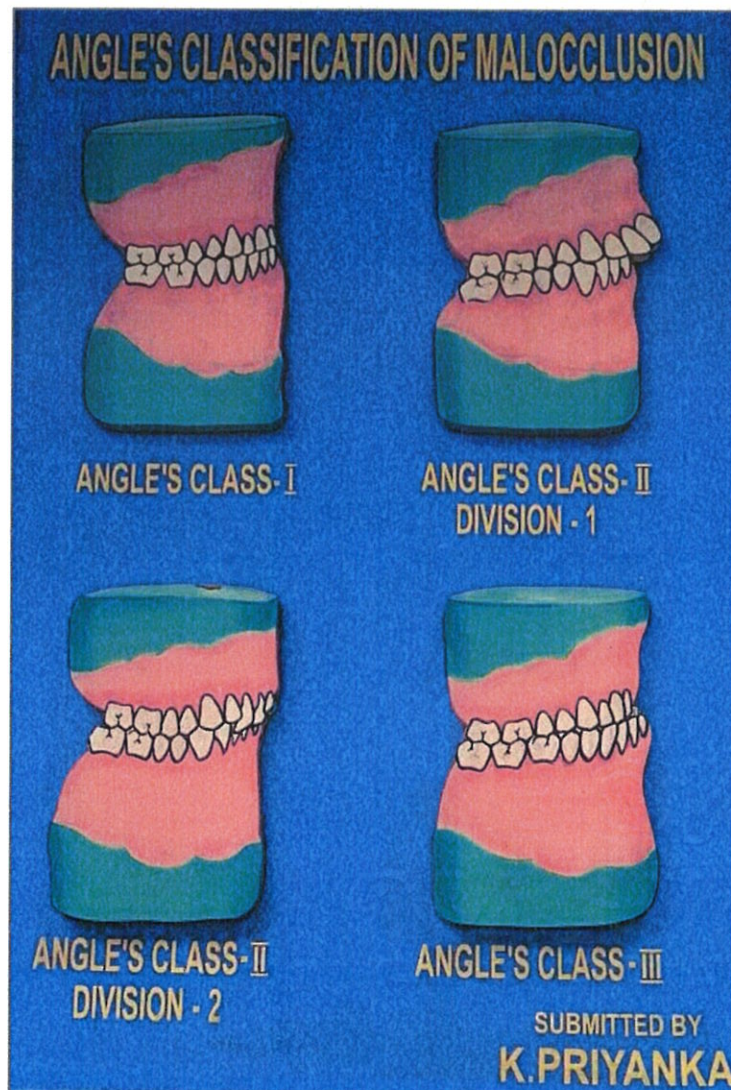
Tel: 044-2765 0160 / 16 Mobile: 98417 35858. PDCH.IN



PRIYADARSHINI DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

MALOCCLUSION



Handwritten signature
**PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR, TAMIL NADU**

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikarai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

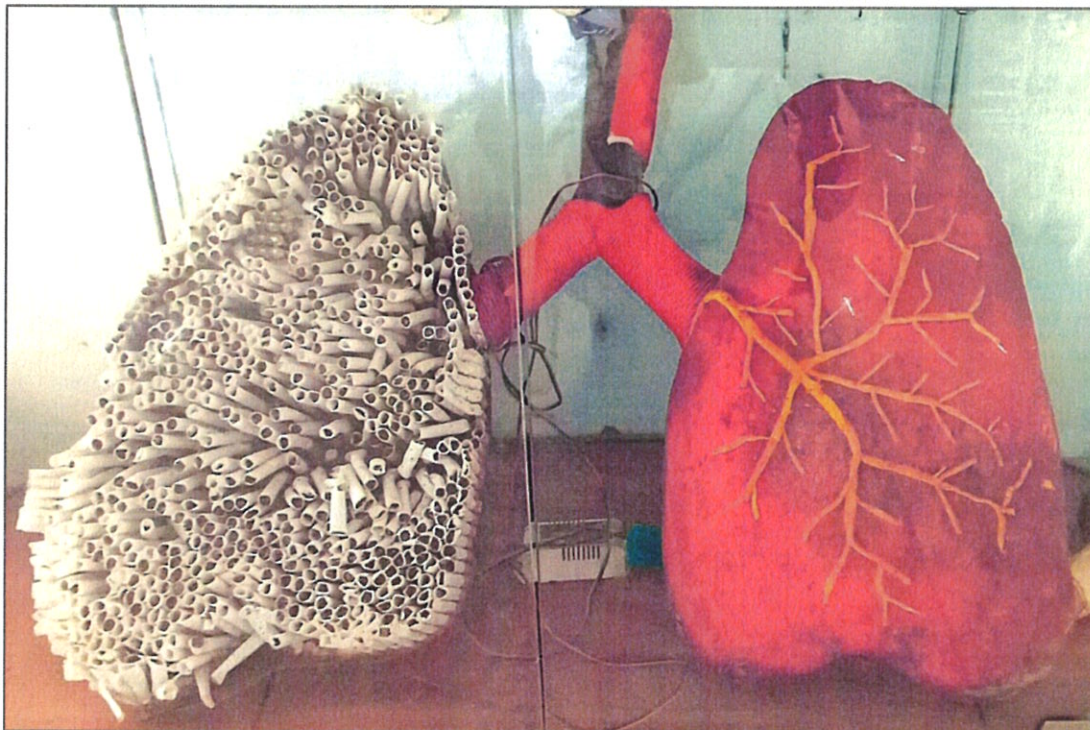
Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**



PRIYADARSHINI
DENTAL COLLEGE AND HOSPITAL

(Approved by Dental Council of India, New Delhi & Affiliated to The Tamilnadu Dr. M.G.R Medical University, Chennai - 32.)

TOBACCO AWARENESS



Principal
PRINCIPAL
PRIYADARSHINI DENTAL COLLEGE & HOSPITAL,
PANDUR - 631 203.
THIRUVALLUR TK & DIST. TAMIL NADU

Managed by Indira Education and Charitable Trust

Redg Off: No .19, Govindan street, Ayyavoo colony, Aminjikai, Chennai - 600029.

Tel: 044 2374 1616/1717/1818/1919

Campus Off: No.1, V.G.R Gardens, V.G.R Nagar, Pandur – 631203. Thiruvallur.

Tel: 044-2765 0160 / 16 Mobile: 98417 35858. **PDCH.IN**