

Perio Vihara

From Classrooms to Clinics... Shaping Young Professionals

An E-newsletter powered by:

**Department of Periodontology and Implantology,
Buddha Institute of Dental Sciences and Hospital,
Patna, India**



Messages from Principal, BIDSH and Editorial Team

Case in Point: Discussion of Clinical Cases

Perio-Legacy: Facts about our Heritage

Perio-Gyan: Do you Know?

Research Radar: Latest Researches in the Field

Perio in Action: Recent Highlights of the Department

Floss your Brain: Puzzles between Classrooms & Clinics

Tips from PERIO-PARI : Pass on to your Patients

Editorial Team :

**Faculties, Department of Periodontology and Implantology,
BIDSH, Patna**

Message from the Principal, BIDSH

Knowledge is a power to be shared, for that is how it uplifts the society. I am immensely proud of the Department of Periodontology of our Institution for having taken this wonderful step towards disseminating knowledge. I hope the readers are enlightened and wish the editorial team all the very best.



Dr. (Prof) Ujjal Chatterjee
Principal, BIDSH, Patna

Message from the Editorial Team

The art and science of Dentistry have taken gigantic leaps over the last quarter of a century. But the leaps of advancement of Periodontics and Implant Dentistry have been disproportionately pronounced, when compared to that of Dentistry as a whole. From a subject largely conceived as one dealing only with “scaling and root planing”, even until a few decades ago, today the subject stands tall as a discipline dealing also with osseous and plastic surgeries, minimally invasive procedures, laser-aided surgery, microsurgery, together with implant dentistry.....the list goes on.

The PERIO-VIHARA e-newsletter will try to open the doors to the magical world of this “new age” Periodontics ajar to one and all, especially to youngsters who have joined Dental schools recently.

We look forward to questions and suggestions from each and every one of our readers and believe that this interaction will facilitate our endeavour.

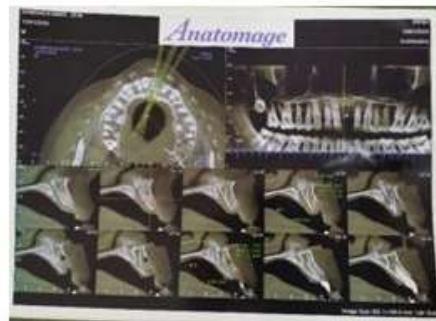
You can reach out to us at : teamperiobidsh85@gmail.com
With warm regards
Editorial Team
PERIO-VIHARA E-newsletter

Case in Point: Discussion of Clinical Case: 1

Augmentation of Alveolar Ridge : This is a surgical procedure to rebuild lost alveolar ridge in height and/or width using bone grafts to restore volume for better aesthetics or to support future dental implants.

A patient reported to our Department with a missing tooth : 21. Upon clinical and radiographic evaluation a deficient alveolar ridge was observed, rendering it unsuitable for implant placement.

The site was augmented with a xenograft using the principles of guided bone regeneration (GBR). At 6 month follow-up significant bone regeneration was observed with appreciable increase in ridge dimensions and bone density, as evaluated by Cone Beam Computed Tomography (CBCT). The site is now ready for implant placement. This case was done by **Dr Sneha Mishra**, an outgoing postgraduate student of the Department.



Preoperative photograph and Preoperative CBCT



Postoperative photograph and Postoperative 6 months CBCT

Case in Point: Discussion of Clinical Case: 2

An esthetic makeover using Lip repositioning and Crown Lengthening surgical techniques : Who does not want to radiate a beautiful smile? But what if someone's face is marred by a gummy smile owing to a hyperactive upper lip? A Periodontist may have a solution.

A patient reported to our Department with dreams of an esthetic makeover of her smile. Her dreams were materialised by **Dr Rishita Singh**, an outgoing postgraduate student of the Department, with Lip Repositioning surgery, further enhanced by Crown Lengthening Procedures of maxillary anterior teeth. The result speaks for itself.

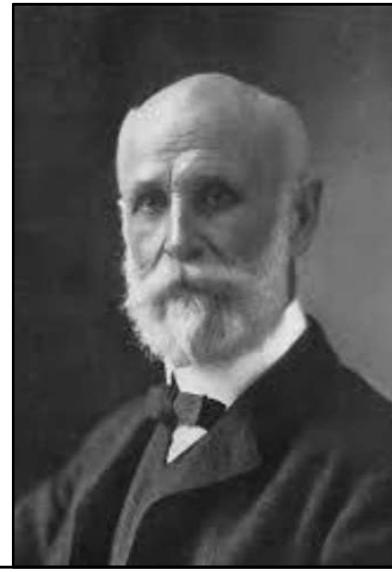


Perio-Legacy: Facts about our Heritage

John M. Riggs was born in 1811 in Connecticut, USA. He had natural mechanical ability and worked in a blacksmith's shop making farm tools, a skill of his which would later prove cardinal to the practice of Periodontology. In late 1830s, Riggs fostered a close friendship with Horace Wells while training under him. He later went on to become the first person ever to perform painless extraction under nitrous oxide anaesthesia on Wells himself.

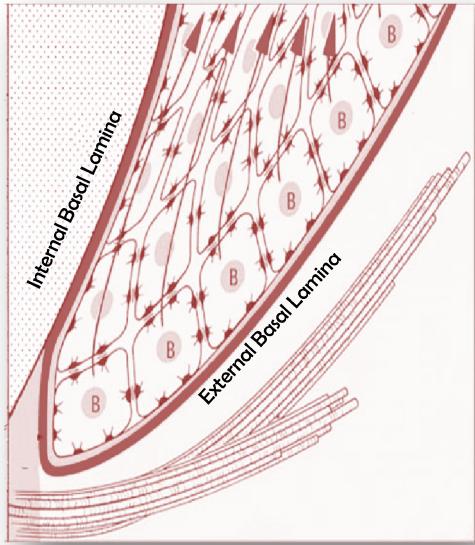
After becoming gravely interested in maladies afflicting the gums, he decided to limit his practice only to the diagnosis and treatment of periodontal diseases.

His lifelong dedication to clinical study of the diseases of gums led to the conclusion that various phenomena occurring in the process of gingival disease, from its earliest manifestations as marginal gingivitis to final exfoliation of the teeth were all expressions of the same disease. So great was his devotion to this field, that he is rightly considered as '**Father of Periodontology**'.



John Mankey Riggs
(Oct 25, 1811 - Nov 11, 1885)

Perio-Gyan: Do you Know?



The junctional epithelium is the only tissue in the body that faces and attaches to both a soft tissue and a hard, mineralised tissue (the tooth). This makes it a unique tissue in the human body. It achieves this through:

Internal Basal Lamina (IBL): Faces and attaches to the tooth surface (enamel, cementum, or dentin). Compositionally, it lacks common basement membrane proteins like Type IV and VII collagen but contains specialized proteins like Laminin-332, amelotin, and O DAM.

External Basal Lamina (EBL): Faces the underlying gingival connective tissue (lamina propria). It is similar to a typical basement membrane found elsewhere in the body, containing Type IV collagen, perlecan, and nidogen.

Research Radar: Latest Researches in the Field

Porous Tantalum

As a dental implant material, Titanium has enjoyed popularity for decades due to its exceptional biocompatibility and low cost. However, there seems to be competition ahead. Porous Tantalum might come up as a potential challenger soon. Its highly porous, trabecular structure allows true bone ingrowth (**osseoincorporation**) in addition to surface bone ongrowth. Tantalum has an elastic modulus closer to cancellous bone, which may reduce stress shielding and promote more physiologic load transfer. It also exhibits a high coefficient of friction, improving initial stability, particularly in poor-quality bone. But its chances of replacing Titanium as a dental implant material in the near future is less because while biologically promising, tantalum-enhanced implants are more expensive and lack the long-term clinical evidence base of conventional titanium implants. Want to read more about Tantalum?

You can visit here to know more :

<https://doi.org/10.1016/j.jmrt.2024.03.200>

Perio in Action: Recent Highlights of the Department

A hands-on workshop (Pre-Convention Course) on “**Imaging to Insertion: Guided Implant Dentistry**” was successfully conducted during the 23rd ISP PG Convention at Kolkata on 3rd April, 2025 (Golden Jubilee Year).

The session provided a comprehensive overview of diagnostic imaging modalities, intraoral scanning and their role in precise treatment planning for guided implant placement. Participants gained practical insights into translating radiographic findings into accurate surgical and implant placement decisions.

The course was well received by delegates for its clarity, clinical relevance, and interactive learning approach.

Our faculties (**Dr. Manisha Mallik, Dr. Toshi, Dr. Surupa Dutta, Dr. Shashwati Paul and Dr. Gyan Prakash**) worked tirelessly for conducting this programme.



Floss your Brain: Puzzles between Classrooms & Clinics

Puzzle 1:

“Guess the Lesion”



I am a well circumscribed, pedunculated, soft lesion in the gingiva of a 32 years old female patient with poor oral hygiene.

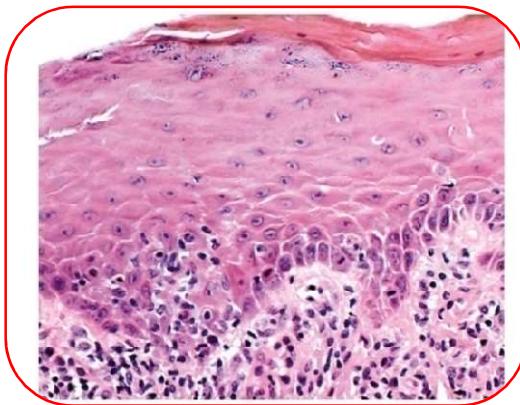


What am I most likely to be?

- a) Verrucous carcinoma
- b) Gingival fibroma
- c) Angiogranuloma
- d) Peripheral giant cell granuloma

Puzzle 2:

The biopsy specimen from a gingival lesion shows :



- Hyperkeratosis
- Focal basal cell degeneration
- Dense band like infiltrate in the lamina propria
- Saw-tooth like rete pegs

What is the lesion?

Tips from PERIO-PARI: Pass on to your Patients



Brushing vigorously is
good for oral health!

Never
brush vigorously.
Brush gently but
meticulously.

