Lecture 1
Occlusion: Modern Practice and Future Innovation

By Mr. Andrew Keeling

Aims & objectives

• To review current best practices for occlusal diagnosis and prosthodontic treatment

• Describe the bio-mechanical functions of different teeth, and the natural occlusion

• Identify potentially relevant occlusal contacts/interferences

• Select an appropriate articulator for the clinical situation

• Employ simple strategies to overcome common occlusal problems

• To describe the digital research in this field, and how this may benefit general practice

Learning Outcomes

• Delegates will be able to efficiently identify relevant occlusal considerations, and plan appropriate restorative treatment

• Delegates will gain knowledge of current digital research, and its place in future general practice
The Management and Treatment of the Failing Dentition

Part 1 and Part 2

By Mr. Neil Millington

A combination of increased longevity alongside effective preventative methods of controlling dental disease has led to an ageing population who are neither edentulous nor totally dentate and free from restorations.

Aims & objectives

- Describe how to examine, diagnose and develop a treatment plan for patients who have had extensively restored and failed dentitions.
- Present a management rationale, together with details of treatment stages, illustrated with specific cases photographed during treatment in a practice environment.
- Discuss methods which allow for controlled and predictable solutions when managing the failed dentition.
- Provide an understanding of the role of the restorative dentist in the diagnosis, treatment planning and maintenance of the extensively restored dentition.
Lecture 3

Periodontal Management- What, Where and When?

By Dr Fiona Blair

Aims:

• Review optimal regimes for periodontal disease management.
• The role of medication, in aetiology and treatment of periodontal disease.

Objectives:

• To have protocols for treatment and appropriate use of antimicrobials, in management of periodontal disease(s).
• To understand the management and long term follow up of treated periodontal conditions.
• To understand the influence of medications in aetiology of periodontal conditions, and their management.
Lecture 4

Shake Rattle and Roll

By Professor Damien Walmsley

This lecture will cover research done in the field of Ultrasound at University of Birmingham, England.

Aims and Objectives

- The aim of this presentation is to provide the latest overview of research projects in the field of ultrasonics in dentistry.

- Research in the area of ultrasonics has been one of my long term themes. It started with the ultrasonic scaler but over the last three decades has involved powered toothbrushes, endodontics, oral surgery and now nanoparticles. The latest research findings are in the area of cavitation induced biofilm removal, effectiveness of endodontic instruments and the use of antimicrobial sub-micron particles.

Learning Outcomes

- Describe how cavitation around ultrasonic instruments is effective at biofilm removal from both external and internal tooth surfaces.

- It will also include biofilm removal from titanium surfaces. The use of enhanced ultrasound may provide an additional benefit in cleaning contaminated surfaces.

- The current ideas on the use of ultrasound in endodontics will be covered.

- Ultrasound is used to cut bone in Piezosurgery applications which also finds applications in implant dentistry. Our latest research looks at possible benefits from the healing effect of ultrasound.

- Latest research on the use of antimicrobial sub-micron particles and their interaction with dentine surfaces. Ultrasound may be used to enhance their movement down the dentinal tubules.
Lecture 5

The Acutely Inflamed Pulp

By Mr. Satnam Singh Virdee

Aims:

- To improve competence in achieving local anaesthetic success

Objectives:

- Define the clinical profile of an acutely inflamed pulp
- Discuss key pathophysiological changes
- Critically analyse theories that explain why it is difficult to attain anaesthesia in the acutely inflamed pulp
- Outline a staged approach that can help increase success rates
- Discuss key variables (volume, technique, solution type etc...) that influence anaesthetic efficacy and dispel common misnomers
Lecture 6

Contemporary operative caries management: let's do it "MI" way!

By Professor Avijit Banerjee

Aims

In his provocative presentation, Prof Banerjee will outline the modern approaches of selective minimally invasive (MI) caries management where dental tissue and pulp preservation is paramount. He will discuss briefly the operative technologies available and the use of adhesive biomaterials to maintain pulp sensibility. This will contrast the traditional approaches still often practised inappropriately. He will provide both clinical and scientific evidence of the MI approach as well as providing clinical tips in managing deep caries.

Learning outcomes:

- To understand the MI operative management of deep caries, where conserving tooth structure and pulp sensibility is paramount.
- To be aware of the latest operative technologies available to selectively remove caries-infected dentine.
- To be aware of the latest biomaterials that can be used to restore adhesively, the MI cavities created.
- To be aware of the opportunity of the distance-learning KCL MSc in Advanced Minimum Intervention Dentistry (AMID).