Radiography and its Use in Dental Treatments

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Learning Outcomes

• To discuss the uses of radiography in the provision of dental treatment

• To appreciate the limitations of radiography and minimise the risk of retakes

• To appreciate the risks of radiation and justification of its use in dental treatment
Use of Radiography in Dental Treatment
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Uses of Radiography

- Bitewings
- Periapicals
- Occlusals
- OPT / Panoramic
- Cephalometric
- Cone Beam
Using Radiography

- Operator responsibilities
- Taking the radiograph
- Developing the radiograph
- Reporting and auditing the radiograph
- Storing the radiograph
- Using the radiograph
How Faults Can Affect Diagnosis
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Roles and Responsibilities

• Anyone involved in radiography has to aim to achieve good practice
• Radiation should be taken seriously
• Exposure should be kept to a minimum
• Patients, staff and public kept safe
• Adhere to the regulations
• Quality assurance
IR(ME)R 2000 Regulation 6

• No person shall carry out a medical exposure unless

  • it has been justified by the practitioner as showing a sufficient net benefit
What’s the Big Deal??

• Damage to body cells caused by radiation
• Potential to cause cancer
• Risk / benefit ratio
• Risk to patient / operator / public
DNA Mutation

- Cell survives but mutated
- Mutation repaired
- Cell death
- Unviable Cell
- Viable Cell
- Stoch. eff.
Avoidable Film Faults
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Faults

• Some can be avoided
• Others are more difficult to predict
• Patients
• Communication
• Processing
• Technique
• Exposure
Conclusion

• Take responsibility seriously
• Aim to produce Grade 1 image every time
• Work together
• Follow procedures