DECONTAMINATION OF INSTRUMENTS IN DENTISTRY

Dr MV Martin
University of Liverpool
DENTAL INSTRUMENTS

- In UK approximately 3500 million instruments are decontaminated and processed each day.
- Most of these are critical.
DENTAL INSTRUMENTS

IN UK APPROXIMATELY 3500 MILLION INSTRUMENTS ARE DECONTAMINATED AND PROCESSED EACH DAY

MOST OF THESE ARE CRITICAL
WHAT METHODS ARE USED FOR DECONTAMINATION?

- MANUAL
WHAT METHODS ARE USED FOR DECONTAMINATION?

- MANUAL
- ULTRASONICS
WHAT METHODS ARE USED FOR DECONTAMINATION?

- MANUAL
- ULTRASONICS
- ENZYME
WHAT METHODS ARE USED FOR DECONTAMINATION?

- MANUAL
- ULTRASONICS
- ENZYME
- WASHER/DISINFECTORS
Dr AJ Smith
Consultant Microbiologist
University of Glasgow
METHODS OF DECONTAMINATION
Does manual cleaning work?
DECONTAMINATION OF BURS (Whitworth et al 2004)
MANUAL CLEANING

- DOES NOT WORK
- NOT REPRODUCIBLE
- DANGER OF SHARP’S INJURIES
Does ultrasonic treatment clean dental instruments?
Ultrasonic cleaners in dentistry

- Often ineffective due to poor servicing
Ultrasonic cleaners in dentistry

- Often ineffective due to poor servicing
- Cycle is often interrupted
Ultrasonic cleaners in dentistry

- Often ineffective due to poor servicing
- Cycle is often interrupted
- Inappropriate solutions used
DECONTAMINATION OF BURS (Whitworth et al 2004)
Enzyme solutions
Washer disinfectors
DECONTAMINATION OF BURS (Whitworth et al 2004)
Single use instruments
Single Use Instrumentation

- 54% of dentists
- 75% dental nurses

WERE NOT FAMILIAR WITH SINGLE USE SYMBOL
Specific dental instruments
SPECIFIC INSTRUMENTS

- BURRS (DRILLS)
- MATRIX BANDS
- HANDPIECES (DENTAL DRILLS)
CONCLUSIONS

- METHODS OF DECONTAMINATION OF DENTAL INSTRUMENTS IS POOR IN DENTAL PRACTICE
CONCLUSIONS

- METHODS OF DECONTAMINATION OF DENTAL INSTRUMENTS POOR IN DENTAL PRACTICE
- POOR UNDERSTANDING OF WHAT IS REQUIRED
Hygiene shock as dentists are told to clean up filthy surgeries

By Ian Smith
Scottish Political Editor

The scandal of Scotland's filthy dental practices was exposed yesterday as a major study showed chronic hygiene failures in surgeries.

Medical chiefs have sent letters to every dentist in the country ordering them to dramatically improve sterilisation procedures in a bid to protect the public against infection.

The move came after a comprehensive investigation by the Scottish Executive found serious lapses in the way dentists clean the equipment they use to treat patients' mouths.

Some dental instruments such as mirrors, dental probes and syringes are being re-used without being properly cleaned.

The survey also found dentists repeatedly using equipment after having had their hands merely washed, and high levels of ignorance over how to date items on packs.

The failures, expose the public to
SOLUTIONS

- DENTAL STUDENTS SHOULD BE TAUGHT CLEAR UNEQUIVOCAL DECONTAMINATION METHODS
SOLUTIONS

- DENTAL STUDENTS SHOULD BE TAUGHT CLEAR UNEQUIVOCAL DECONTAMINATION METHODS
- THERE SHOULD BE CLEAR NATIONAL GUIDELINES
SOLUTIONS

- Dental students should be taught clear, unequivocal decontamination methods.
- There should be clear national guidelines on decontamination in dental practice.
- Centralisation of decontamination and sterilisation.