

DETERGENTS/ENZYMATICS/LUBRICANTS



WHERE IT ALL BEGINS.....

- >Cleaning of instruments starts at the point of use

- >Allowing blood, debris to dry on instruments
causes:

- >rust

- >pitting

- >difficulty using instrument

- >more time/effort to clean

- >biofilm

- >increased risk of patient infection

WHERE IT ALL BEGINS.....

Cleaning at point of use:

- > In O.R. or L&D— a basin of clean, sterile water on surgical set up
- > Endoscopy – bedside cleaning process for working channel and exterior
- > Emerg/clinics/nursing floors – remove gross soil asap post procedure using ????

TRANSPORTING INST.....

- >Should not be transported with gross soil
- >Should not be transported in liquid
- >Use an enzymatic transport gel, spray, foam etc....
- >Wet towel (water, not saline) – can purchase moisture bags
- >Use covered containers
- >Use appropriate PPE

DECONTAMINATION MDRD

- >MDRD uses enzymatics, detergents, lubricants, disinfectants
- >manual, automatic cleaning or combination of both
- >need to know/follow the instrument IFU
- >need to sort instruments, separate sharp/cannulated instruments, full disassembly
- >soak anything that needs some hand washing before placing in pasteurmatic or washer

DECONTAMINATION MDRD

- >Use of enzymatic to soak item
- >Enzymes break down proteins that make up blood, body fluids, pus, fats, etc...
- >4 types of enzymes – hence the terms dual enzymatics, triple enzymatics – how many types of enzymes in the solution
- >Enzymatics can be acid, neutral or alkaline – neutral is generally used

DECONTAMINATION MDRD

- >Need to read and follow the instructions for use on the enzymatic bottle
- >Need to know the chemical make up of your water - ? Match your enzymatic/detergent
- >Dilution rate is very important
- >Temperature of water is important
- >Length of soak is important
- >Do not mix with detergent – inactivates enzymes
- >Rinse, rinse, rinse..... – removes residuals

DECONTAMINATION MDRD

- >in washer disinfectant, same enzymatic principles apply
- >if changing vendors, need to have technician in to reset all values in washer programming
- >dilution rate needs to be set with amount of litres of water in the enzymatic wash cycle
- >temperature the water reaches needs to be set
- >length of time needs to be set

****DON'T JUST CHANGE ENZYMATICS WITHOUT THE RESEARCH AND FOLLOW UP**

DETERGENTS AND CLEANING

- >Detergents can be acid (low pH), neutral or alkaline (high pH), depending on needs – neutral most used
- >Acid: pH of 6.5 or less
- >Neutral: pH of 7
- >Alkaline (base): pH of 7.5 or greater

DETERGENTS AND CLEANING

- >Detergents need to be low sudsing
- >May contain corrosion inhibitors
- >May prevent bacterial growth
- >Likely contain surfactants – aka ‘wetting agents’ – decrease surface tension of water, disperses and suspends soils & grease particles in solution for easier rinsing; allows water to run off for less spotting

DECONTAMINATION MDRD

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****DON'T JUST CHANGE DETERGENT – THEY ARE NOT ALL THE SAME**

SOAPS

- >Are used for hand washing, not instrument care
- >Remove debris by mechanical action, loosening and suspending in solution
- >Work best in softened water – don't work well in hard water
- >Don't rinse off well
- >Organic base, therefore prone to bacterial growth

INSTRUMENT PASTE

- >Is considered to be an abrasive cleaner
- >Contains a very fine grit designed to be used with certain instrument surfaces
- >Do not confuse with kitchen abrasive cleaners (Comet, Ajax etc....) – do not use as these will scratch instrument surface

LUBRICANTS

- >Can be instrument milk, silicone spray, water soluble oils (drops or spray)
- >To help instruments work better, smoother
- >Keeps box locks free moving & instrument from feeling stiff to open/close
- >Must be water soluble, non-toxic and free of grease/oil – must be made for instrument care so steam can penetrate readily

LUBRICANTS

- >Instrument milk can be done manually or automatically
- >Automatically – usually a metered dose is done in the last rinse cycle of washer disinfectors – critical that box locks are positioned to allow water to run through, carrying enzymatic, detergent, rinse water and lubricant each cycle

LUBRICANTS

Cons of Manual use of instrument milk:

- >used after instruments are cleaned & disinfected
- >soak for a period of time, then remove and may need to rinse – see IFU
- >high risk of re-contaminating
- >risk of bacterial growth in the soaking container despite antimicrobial added
- >container needs to be emptied, cleaned, disinfected, sterilized weekly
- >risk of occupational injury/spills lifting container

LUBRICANTS

Pros of Manual use of instrument milk:

- >there is an antimicrobial added to decrease risk of bacterial growth
- >usually has a rust inhibitor added
- >is water soluble
- >thin solution, so gets into cracks/crevices
- >steam can penetrate

******In today's fast paced environments, the automatic process is more widely used

LUBRICANTS

Water soluble oils:

- >for power drills

- >usually sold by vendor for power equipment

- >may be spray or drops

- >follow drill manufacturer instructions carefully – over oiling may show up on wrappers – rendering drill unsterile

- >steam can penetrate

QUESTIONS?