IDSc Annual Conference at Blackpool

November 29 – December 1, 2010

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The Institute of Decontamination Sciences (IDSc) annual conference was held at the Hilton Hotel, Blackpool, England from the 29th of November to the 1st of December 2010. With a programme focused on the most relevant UK decontamination and sterilization topics, it featured a range of speakers from the UK and Europe. Unfortunately there were adverse weather conditions and substantial snowfall across most of the UK which prevented the arrival of some speakers and delegates but as is often the case credit must go to the organisers and other speakers who through their flexibility ensured that the conference was hardly, if at all, affected by the bad weather.

The conference began shortly after lunch with an introduction and welcome from the President of the IDSc, Dr Robert Spencer and the Chair, Val O'Brien, who talked about the challenging economic times we face in the next 12 months and how it could affect the UK National Health Service and the world of decontamination. Bob Kingston, an Authorising Engineer (Decontamination) from the South of England delivered the first presentation of the day with a run through of standards and guidance that applied to endoscopy decontamination. He paid particular attention to the UK Health Technical Memoranda (HTM) and discussed the draft of HTM 01-06, Endoscopes.

Bob Kingston was followed by Graham Stanton from Welsh Health Estates in Cardiff who talked about the key differences between standards and guidance in Wales as a result of government devolution and a separate health economy. It is evident from his presentation that the once seamless application of guidance across the UK is now at an end and the differences in guidance between England, Wales and Scotland are only set to widen further.

Consultant Endourologist, Professor Tony Young, from Southend Hospital gave an interesting presentation on the use of a pass through a hydrogen peroxide sterilizer located as part of the hospitals decontamination facility for the terminal sterilization of items such as flexible cystoscopes. This would lead the conference nicely onto the following day's sessions which were titled «To sterilize or not?» and «Over the top?» It was good to see a front line clinician be so enthusiastic and talk so positively about direct involvement in improvements in decontamination standards.

Later that afternoon Barry Johnson from North Tees and Hartlepool NHS Foundation Trust in the North East of England discussed the implementation of a dedicated ward hygienist team with a defined career path in decontamination. Their role was to ensure that wards and departments were deep cleaned when required and then decontaminated. From this role they could progress to technician level and to working in endoscopy or sterile services. He stated that the recognition they had received amongst colleagues combined with career progression opportunities had given them a real pride in their work. He also talked about how they had adopted a fogging hydrogen peroxide system for use within the Trust by this team. The final presentation of the afternoon was delivered by Matachana regarding their new «S» range of sterilizers with a faster cycle time.

The Tuesday morning session was entitled «To sterilize or not?» and this set the tone for the day, which seemed to be all about discussing the things we often blindly take for granted as essential, and questioning how far we should go in the quest for improvements. The contentious nature of some of the presentations was thought provoking and should force us to look into our own working practices.

Dr Adam Fraise of University Hospitals, Birmingham began the session with a presentation entitled «Do we need to sterilize flexible endoscopes?» His presentation discussed whether the evidence suggested we did or not and whether disinfection was adequate for flexible endoscopes.

His argument was responded to by Professor Young from Southport, who as you would expect if you were at his previous day's presentation, advocated sterilization of some flexible endoscopes. Interesting arguments were put forward by both presenters. There was opinion amongst many of those that were present that decontamination professionals and clinicians alike will need to give careful thought in deciding if or when a particular endoscope needs sterilization given the challenging litigation arena we now find ourselves in during these even more challenging economic times.

Peter Hoffman of the Health Protection Agency, England then presented on the selection and application of chemical disinfectants. He offered some pertinent advice for those having to make choices including being sure of the proposed use, knowing what it is that needs disinfecting (for example a hard surface, an endoscope, a room etc.) and how the disinfectant is to be delivered. He highlighted some of the pitfalls of disinfectant use and some of the common misconceptions around selection of chemicals.

After the IDSc annual general meeting and lunch, the afternoon session entitled «Over the top?» was started by Dr Jimmy Walker with an interesting presentation called «Somewhere in Space». Dr Walker described the work done by the Health Protection Agency on decontamination techniques for the space industry (both the European Space Agency and NASA) and how they evaluated several processes including vaporised hydrogen peroxide. As part of that work, they undertook a desktop evaluation exercise looking at potential cleaning procedures to prevent both backward and forward contamination. This is the contamination of space collected artefacts with earth based micro-contaminants and contamination of earth based objects and astronauts with yet unidentified contaminants from space. This led to further work looking at microbiological

growth on electronics and equipment in spacecraft and the use of synergistic decontamination concepts with combination systems such as hydrogen peroxide, wipes and anti-microbial fabrics and materials. He concluded his presentation with a discussion of the design for a technology road map that the agency had worked on with the aim of allowing Mars samples to be decontaminated, kept free from further contamination and safely evaluated by the wider scientific community.

The second speaker of the session was Dr Dominique Goullet who is the Honorary President of the Association Française de Sterilisation (AFS) in France. His presentation, entitled «Sterilization: Light and Shadows» was a provocative look at the standards and practices we use and accept across Europe and whether there was a sound evidence base for continuing with them. He highlighted several practices that he felt were underpinned by either hard evidence or had a sound basis in good or improved outcomes and correspondingly identified many that he thought were not underpinned. Among those he questioned were the need for a disinfection stage in washer-disinfectors in most European countries and need for a class 8 clean room in a decontamination facility. He stated that «There is no publication providing evidence that the quality of the air within the CSSD has any role in assuring successful sterilisation results».

Dr Goullet also raised some other contentious points regarding re-use of packaging and rejection of containers with small amounts of water. He concluded with a discussion of whether decontamination and sterilization was a core hospital activity and urged hospitals to consider that it was.

Dr Goullet was followed by a presentation by Wayne Spencer entitled «Should we? Shouldn't we?» which took a look at whether cost effectiveness was a driver for improvement and if evidence pointed to marginal improvements in decontamination standards having an effect on patient outcomes. The presentation looked at the vCJD in England issue and how that had been used as change mechanism and whether the occurrence of new rare illnesses could be justified as a reason for increasing standards. It looked at the Quality Adjusted Life Years approach used by NICE and whether, if applied to decontamination spending, would force the decontamination profession to think and spend differently.

He then discussed improvement evidence that may be available by comparing some commonly used benchmarks such as surgical site infection rates and cancelled operations but stated that few robust links could be identified. The presentation concluded with a look at the ethical alternative approach to improvement and the impact of the change in health policy and spending advocated by the current UK government.

The final day began with a session looking at the implications of the proposed Health Technical Memorandum 01-01's «wet versus dry» drafting. These are draft requirements proposed by the UK health department that require instruments to be kept humid/moist from the time they are used to the time they are placed in the washer-disinfector in the sterile services centre.

The first presentation was an abridged repeat of a presentation that Wayne Spencer delivered at last year's conference to serve as a brief introduction to the subject. Spencer highlighted that work undertaken at Southampton University led by Dr C.W. Keevil showed that if instruments were kept moist prior to reprocessing then they could more easily be removed of any protein. It served to highlight the reasoning behind the drafting. The methods discussed in the text including the use of sprays, gels and moistened pads were then presented. He then highlighted the issues to consider before adoption such as patient exposure to hazardous substances, reuse of the moistened instruments during the procedure, operation/transport times and instrument compatibility. This was followed by the main presentation delivered by Margaret Hollis and Sylvia Martin. Both speakers had been taking part in a trial designed by the English Department of Health to look at the impact of adopting a moist instrument process (one whereby the used instruments are kept moist at saturation or near saturation levels till arrival at the sterile services department). Margaret's department had adopted the moist process whilst Sylvia's had continued with a standard dry system. A new protocol for equivalent protein identification had been developed as part of the trial using a device called a «G-box». This device provided a digital image of an instrument highlighting a colour change for areas still retaining protein. As part of the trial both sites will use this device to detect any changes to residual protein levels that may arise from changes made to variables during the trial such as collection frequencies, cleaning chemistries used, pre-treatment of instruments and handling procedures. Margaret stated that both sites have worked hard to minimise variations and differences in their processes and that it was still early days for the trial. They concluded by showing some digital images produced by the «G-Box» highlighting residual proteins.

Val O'Brien delivered the second session of the day with a round-up of the issues concerning instrument migration between sets and trays. Val began her presentation by defining instrument migration and stated that it was the mixing of instruments between one set or tray and another. She then went on to reference the UK specific NICE IPG196 guidance and highlighted how traceability to previous patients had become a much bigger issue since the advent of vCJD than it ever was previously and therefore the prevention of migration had equally increased in prominence.

Val stated that migration can happen when instruments are dropped, supplementary extras are used (especially where they are identical to those present on the set) and tray build sheets are not detailed enough. She advocated good instrument return and transport procedures with appropriate documentation (signed off by theatres) and a robust means of identifying supplementary instruments. Good inventory management was also important. She concluded by saying that any system used for instrument marking and identification must be robust, easy to use and not affected by the process chemical used in the decontamination cycle.

The final presentation of the conference was delivered by Dr Geoff Ridgway OBE, a microbiologist from London. His presentation took a look at the history of sterilization and decontamination from its early mentions of purification in the bible through to the modern day use of complex chemicals and processes. Geoff relayed some of his unique experiences and insights whilst demonstrating that some of the lessons from the past should not be ignored but re-used and applied for the challenges of the future. He concluded by saying that there were still many challenges in our profession and the arrival of new surgical and endoscopic processes would provide us with even more in the future.

Val O'Brien then closed the conference and wished all the delegates a safe journey home through the snow and ice. ■