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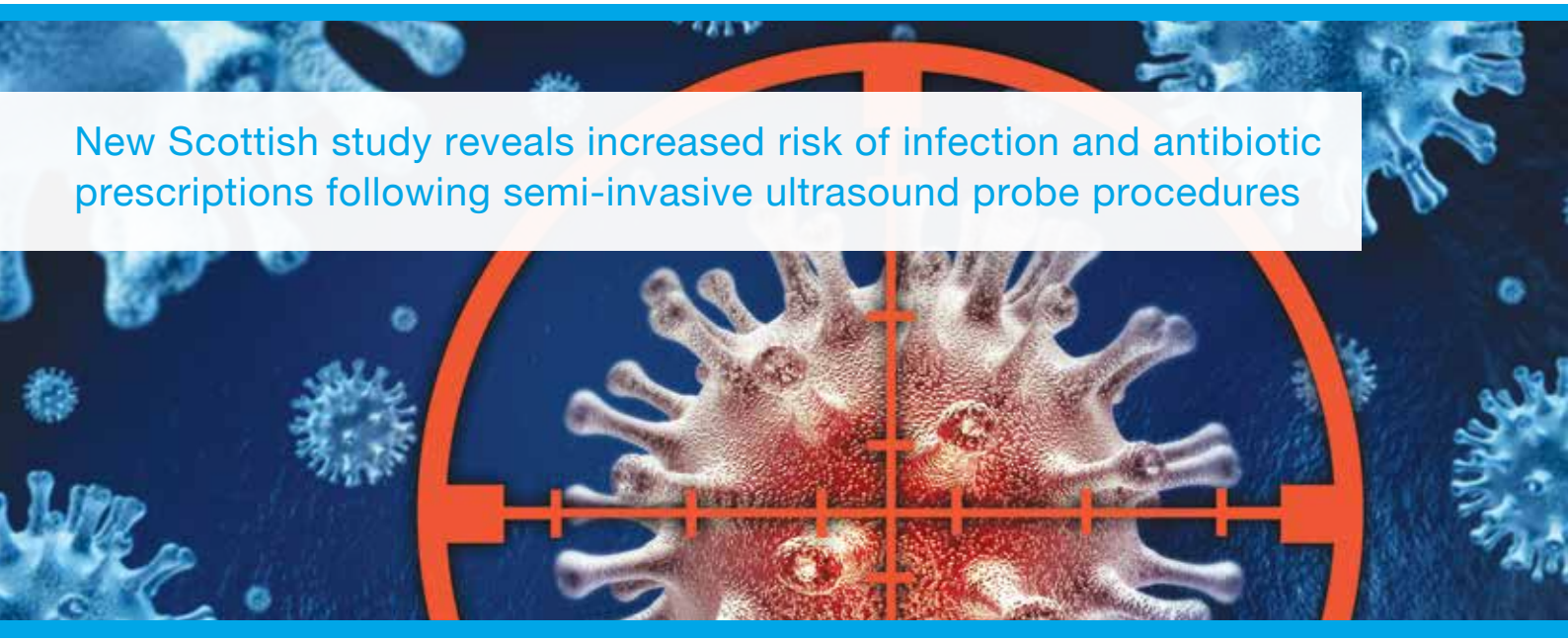
How safe
are your ultrasound probes?

You don't want your patients on antibiotics, fighting infection because an ultrasound probe was not high level disinfected



New Scottish study reveals increased risk of infection and antibiotic prescriptions following semi-invasive ultrasound probe procedures

Study highlights the importance of maintaining proper high level disinfection processes for endocavitary procedures to avoid increased risk of infection

The first population-level study of its kind conducted by Health Protection Scotland and NHS Scotland has demonstrated a greater risk of positive microbiological reports and antibiotic prescriptions within 30 days for adults who had undergone semi-invasive ultrasound procedures (SIUP) when high level disinfection was not used as standard of care.[1]

During the study period from 2010 to 2016, low level disinfection was the primary method used for the disinfection of endocavitary probes.

The study found that in the 30 days after a transvaginal ultrasound scan, patients were 41% (HR=1.41) more likely to have positive bacterial cultures and 26% (HR=1.26) more likely to be prescribed antibiotics than similar patients who underwent gynaecological procedures without ultrasound ($p<0.001$).

For transrectal scans, patients were 3.4 (HR=3.4) times more likely to have positive bacterial cultures and 75% (HR=1.75) more likely to be prescribed antibiotics ($p<0.001$).

The study authors strongly recommend adherence to the current NHS Scotland guidance which came into effect in 2016. It calls for high level disinfection of endocavitary ultrasound probes.[2]

In its conclusion, the new study stated: "Analysis of linked national datasets demonstrated a greater risk of positive microbiological reports and community antibiotic prescriptions within 30 days for Scottish adults who had undergone SIUP procedures in Scotland. This indicates that, prior to the publication of NHS Scotland guidance advocating high level disinfection, the re-use of semi-invasive ultrasound probes without high level disinfection posed an increased risk of infection."

"… failure to comply with guidance recommending high level disinfection of semi-invasive ultrasound probes will continue to result in an unacceptable risk of harm to patients."

Official guidance and standards are helping to prevent the risk of ultrasound infections caused by cross-contamination

In line with growing international concerns, official guidance and standards are being released around the world to help prevent the risk of ultrasound infections caused by cross-contamination.

High level disinfection is recommended in Scottish, Irish and Welsh guidelines as the minimum reprocessing standard for intracavity ultrasound probes that contact mucous membranes. Additionally, the guidelines advise high level disinfection for non-invasive surface probes used on broken skin.[2-4]

In 2016, Health Facilities Scotland (HFS) conducted a national survey of transoesophageal echocardiography, transvaginal and transrectal ultrasound probes to identify current decontamination practice for semi-invasive ultrasound probes and concluded that there is an ongoing risk to patient safety with regard to decontamination of semi-invasive ultrasound probes.[2]

While Ireland's Health Services Executive state: "High level disinfection using the manual multi-wipe system is the least preferred option for disinfecting semi-invasive ultrasound probes. Internationally it is recognised that the use of an automated validated process … will provide enhanced risk reduction of infection transmission."[3]

The National Health Service Wales guidelines recommend that ultrasound probes preferably be disinfected with automated decontamination processes. Manufacturers of automated decontamination devices and manual procedures must provide evidence for reaching the claimed disinfection endpoints and this should be investigated during the procurement process. Traceability should be incorporated in all reprocessing workflows.[4]

In Europe, the European Committee for Medical Ultrasound Safety (ECMUS) guidelines recommend that transvaginal, transrectal, transoesophageal and intra-operative probes undergo cleaning followed by high level disinfection before use on a new patient. Automated, manufacturer validated processes are preferred as long as full documentation of the process (i.e. traceability) is available.[5] ECMUS is a committee of the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB).

trophon® EPR is an effective high level disinfection solution for ultrasound probes that can reduce infection risks and increase compliance

trophon is a safe, versatile and simple solution that supports healthcare facilities in their fight against ultrasound probe cross-contamination.

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trophon EPR also inactivates the mandated subset of microorganisms, as required by European Standards and is proven to also eliminate an extended range of infectious pathogens.


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