

COMMITTEE ON THE SAFETY OF DEVICES

FRIDAY 28 NOVEMBER 2008

10.30 – 3.00pm

ROOMS CR1/CR2

19 FLOOR, MARKET TOWERS, 1 NINE ELMS LANE, LONDON SW8 5NQ

Members Attending

Mr John Williams (Chair)
Mr Guy Alexander
Dr Anna-Marie Belli
Dr Steve Bennett-Britton
Mr Christopher Earl
Dr Roger Evans
Dr Karen Facey
Mrs Shelia Fisher
Mrs Christine Glover
Professor Ian Kimber
Professor Ian Learmonth
Dr John Perrins
Dr Geoff Ridgway
Mr Arvind Singh
Professor Irving Taylor
Dr Gary Thorpe
Dr John Turney
Dr Carl Waldmann
Dr Gordon Watkins

MHRA

Dr Susanne Ludgate
Mr Clive Bray
Ms Hazel Randal
Mr Andrew Crosbie
Mr Stephen Hallworth
Mr Alan Lynch
Dr Christopher Brittain
Mrs Mojisola Ajeneye
Mr David Grainger
Mr F Huckle
Ms L Gear
Ms R Cunningham
Mr Michael Peel

ABHI

Mr Malcolm Carlisle
Mr Mike Kreuzer

Apologies

Miss Cathy Cairns
Professor Julie Kent
Professor Peter O'Donovan
Dr Shelia Peskett
Dr Charles Sears
Dr David Sharpe

Devolved Administration

Dr Nigel Brassington
Mr Calum Campbell
Mr Peter Philips
Ms S Davies
Mrs Elizabeth Qua

1. Welcome

The Chairman welcomed everyone to the meeting.

2. Apologies

Apologies were received from Miss Cathy Cairns, Professor Julie Kent, Professor Peter O'Donovan, Dr Sheila Peskett, Dr Charles Shears, Dr David Sharpe, Mr Andrew Wong, Mr Maurice Freeman, Ms Beverley Norris and Mr Clive Powell

3. Minutes of the last meeting held on 11 July 2008 (8/022)

The minutes of the meeting were approved subject to amendment to the final paragraph under "Any other business".

4. Matters arising (08/023):

Metal on Metal Hip Replacements:

Mr Andy Crosbie informed the Committee that a questionnaire had been sent to 200 surgeons regarding any soft tissue reactions in 568 cases. To date, replies on 250 cases had been received, and feedback was expected to be completed in the next few weeks. He hoped to report back to the Committee in March 2009.

When questioned about the possibility of data being open to misinterpretation, he acknowledged the problem but stated that the Working Group being set up (involving the BOA, the Hip Society and the MHRA) should adequately address this.

He also agreed that various funding options for any future research should be explored.

Communication with Pharmacists:

Dr Susanne Ludgate thanked Mrs Christine Glover for her work on this project. The main issue of concern to pharmacists was their lack of training on devices. Basic information, in the form of posters and leaflets, had been sent out for comments, and it appeared that real progress was being made.

When asked whether device training for pharmacists should begin at the undergraduate stage, Dr Ludgate replied that talks were in hand with the Royal Pharmaceutical Society and the Department of Health on this.

Communication with the Centre for Evidence-based Purchasing:

The Chairman informed the Committee that there was a need to seek financial help for NHS Trusts enabling them to finance Clinical Trials for new and emerging techniques and technologies after CE marking, thereby facilitating their introduction into the NHS.

Contaminated Heparin and Medical Devices:

Mr Stephen Lee informed the Committee that there had been no new incidents reported and that the supply chain now appeared to be clean.

When asked if there had been any progress on inspections in China, he replied that the MHRA Inspectorate had been meeting with their Chinese counterparts, the outcome was, as yet, unknown.

Problems with blood glucose meters:

Mr Stephen Lee informed the Committee that the Agency had received its first Quarterly Report on the safety of these devices (he commented that this form of reporting was a huge improvement on the previous incident-by-incident reporting). The main issues were inaccurate readings and faulty LCDs.

It was mentioned by the Committee that many users in fact used more than one make of meter, and that they tended to take notice of the most favourable reading. It was also noted that different meters had different ways of showing that the battery was low and that, on at least one occasion, the user had confused this message with the glucose reading.

The question arose of a standard tolerated error level. The Committee were informed that the standard was of 95% of readings to be accurate within 5%. However, some meters took the result as a percentage of Whole Blood and others as a percentage of Plasma. Moves were in hand to standardise all meters to give results for Plasma only.

It was also noted that the Patient Information Leaflets should be tested for usability under the European Directive.

Audio scanning for babies:

Mr Alan Lynch informed the Committee that no new reports had been received and no Device Alert issued. The National Screening Programme had taken steps to remove all problem units.

The Committee asked whether, as the number of false negatives was unknown, should not all babies, that had received negative results, be re-screened using approved devices. Mr Lynch stated that as 35 re-tests had already taken place, with no change in any result, this was probably unnecessary, although the Agency would take forward the possibility of a Risk Analysis. The Committee was of the opinion that all these negative results should be referred.

National Meeting of Liaison Officers Groups:

The Chairman thanked Dr John Perrins for presenting a most informative lecture to this group.

Technology Forum:

The Chairman thanked Dr Christopher Brittain for arranging this.

It had raised a number of issues, surrounding tissue engineered products and their regulation. All of these needed to be addressed.

Firstly, non-viable tissue engineered products, not currently covered by the Medical Devices Directives or ATMP Regulations, should be moved under the MDD umbrella urgently.

Other issues raised were: The inadvisability of scrapping European regulations for FDA regulations, disappointment with some other European Agencies' implementation of the Medical Device Directive, the inappropriate use of animal testing, confusion on who to go to for funding advice, earlier engagement with the National Institute for Health and Clinical Excellence, and easier and earlier contact with the various Advisory Committees and Boards.

The Chairman informed the Committee that a report would be produced.

5 Conflicts of interest: A reminder

The Chairman reminded members of the need to declare personal specific and non-personal specific and non-personal non-specific interests in the agenda items. No interests were declared.

6 (i) The Labcor Story: A presentation by Hazel Randal (08/024)

Ms Randal gave a presentation covering the background and latest data on a bioprosthetic heart valve called the Labcor.

In August 2008, the MHRA had received a report from a leading UK heart centre of an unusually high rate of early revision (15%) they had needed to perform on this valve, which had been implanted over the previous 16 months. CalMed, the UK distributor, had elected to cease supplying the valve while investigation was in progress.

This tricomposit porcine biological valve, manufactured in Brazil, had been on the worldwide market for 20 years, with no indication of any serious problem. It had first been used in the UK before 2001, but there had been a 5-year sales gap until CalMed became the UK distributor in 2006. The initial MHRA investigation concluded that:

- There was no inherent flaw in the design
- There were no lot number relationships
- There were no common patient characteristics
- There was a possibility that valve storage and/or pre-operative preparation were an issue*

*This valve, like many tissue valves, was both sterilised by, and then stored in, glutaraldehyde. Instructions for use state that the valve must be washed for a total of six minutes in two separate basins.

In October 2006, while this investigation was still ongoing, a similar report was received from another UK centre. As this significantly raised concerns, the Agency took the following steps:

- Solicited feedback from the remaining 5 UK centres – **No unusual events reported**
- Met the UK distributor who confirmed cessation of sales
- Wrote to all seven implanting centres
- Contacted the Norwegian Competent Authority (CA) to seek feedback from the Norwegian Notified Body (NB) who had been responsible for the CE-marking of the valve – **We later learned that the NB had suspended the CE-mark, meaning that the valve could no longer be sold in Europe**
- Sent a confidential enquiry form to other regulatory authorities (particularly Germany because of the high rates of implants there) - **The feedback contained no significant concerns**
- Held an urgent conference call with the manufacturer*

*Resulting from this call:

- It was confirmed that no lot number relationships were identified
- Valves from the two affected UK centres would be retrieved for independent testing
- There were apparent deficiencies in post-market surveillance

The problem facing the regulator is that, while we may be preventing a perfectly good valve being on the market, at the moment there is a serious risk to patient safety.

The committee made the following points:

- There may be an issue because of the use of continuous sutures. Interrupted suturing is now the standard practice
- Were there changes in the make up of the theatre teams involved?

Following a number of other questions from the Committee, Ms Randall made the following responses:

- Washing – the amount of water used was not specified. However, this was quite normal
- Shelf life – all returned valves were apparently within their “use-by” dates
- Perfectly good alternative products exist
- Reporting of individual complaints does not often happen since it is accepted that all tissue valves fail eventually. However, had these incidents been reported individually rather than as a group this would have been helpful as it would have provided us with an early warning.

The Chairman invited the committee to report back with any specific comments on lessons that could be learned from this and thanked Ms Randal for her presentation.

6 (ii) e-Medical Device Alerts: An oral update by Clive Bray

Mr Bray reported that the Project was now in the hands of the Web Developers and that the target date for “going live” was 1 April 2009.

6 (iii) What is really needed with Medical Devices Directives (MDD): An Industry perspective: Oral presentation by Malcolm Carlisle

Mr Carlisle, of the Association of British Healthcare Industries, made a presentation to the Committee reflecting Industry views on the MDD (which will come into effect on 1 January 2010). The points highlighted were:

- Higher standards for accreditation and expertise of Notified Bodies
- Transparency in enhanced industry compliance
- Complete databases on nomenclature and device register
- Agreed test programmes and continuum of dialogue over new technology
- A new Central Certification Service and International Panel – **It was felt that the EMEA, while vastly experienced in the field of pharmaceuticals, did not have sufficient expertise in medical devices**
- Central audit of Notified Bodies
- Agreed programmes of methodology for HTA
- Partnership with the Commission on new developments

He stated that he hoped that Industry and Regulators could go forward together in order to re-establish the MDD as the “world standard”

6 (iv) An update on the Medical Devices Directives: A Regulator’s perspective: Paper and Presentation by Andy Crosbie (08/025)

Following on from the previous presentation, Mr Crosbie presented a paper on the MDD. He pointed out that the Directive was part of the Regulations on Accreditation and Market Surveillance (RAMS) that would affect all products for sale in Europe.

The devices affected were already regulated in the UK under the “new approach” directives covering:

- Active implants
- General medical devices
- *In-vitro* diagnostic medical devices

The main changes were:

- Previously, the Agency could only recall unsafe “over the counter” devices. Now, it could also recall all types of devices, including those for professional use
- The Agency would now have legal powers to destroy, or order the destruction of, such devices held by manufacturers or distributors
- Whereas, currently, manufacturers (or their Authorised Representatives) were responsible for collecting and passing on safety/performance information, those responsible would be extended to include importers and distributors
- The agency would now have a legal requirement to verify that corrective actions taken by importers and distributors were adequate and complete

There were also areas where current, voluntary Agency practice would become a legal requirement:

- Informing healthcare professionals about device safety problems by issuing medical device alerts etc*
- Exchange information with other European Authorities on device safety, and collaborate with them, and the European Commission on initiatives to improve safety

*There was also a new requirement to inform the public about withdrawals, prohibitions or restrictions of products on safety grounds.

Following the presentation, it was generally agreed that both the Agency and Industry had a duty to “get this right” by June 2009, when the legislation would be finalised.

**6 (v) Working with the media to promote the regulation of devices in safeguarding public health:
Paper presented by Stephen Hallworth (08/026)**

Mr Hallworth, Media Relations Manger of the MHRA, gave a summary of the work done by the Agency’s press office since its establishment in March 2005. He explained that, in a world of ever increasing varieties of media, there was a general expectation that organisations be more open and honest – “No comment!” was no longer an option.

He further informed the Committee that the office had issued various press releases on Medical Devices - including wheelchairs, walking frames and fake condoms – and stated that the Agency needed to look at the story “from the point of view of the people involved in the story”. The public had a right of access to good quality, timely information.

In response to a question by the Chairman, it was shown that roughly one third of the attending members had received media training. The Chairman strongly recommended training to all members and thanked Mr Hallworth.

**6 (vi) Result of the Clinical Investigation Audit:
Paper presented by Susanne Ludgate (08/27)**

Dr Ludgate reported that, of the 66 clinical investigations submitted to the Competent Authority in 2007, three had been randomly selected to undergo the audit procedure. In all three cases, the ad hoc groups had consisted of the Committee Chairman and three Committee Members with experience relevant to each device.

In summary, the findings were:

- In all cases they agreed with the decisions of the Competent Authority on: grounds/no grounds for objection; no additional grounds should have been raised; no grounds that should not have been raised
- Procedures and timescales had been strictly adhered to as required by the SOP
- The choice of internal and external assessors was entirely appropriate
- All communications by the Competent Authority to the manufacturers were “exemplary, clear and helpful”. The same, however, could not be said about all communications by the manufacturers.

There were comments made by the auditors specific to individual investigations:

- In one case, it was felt that fatigue-testing and strength of materials was not looked at in enough detail, particularly after re-sterilisation
- In another, there appeared to be insufficient communication with the Ethics Committee especially in situations where the patient could not give consent*

*Dr Ludgate stated that no opinion from the Ethics Committee had yet been received.

After thanking the Chairman and the relevant Committee Members for their work on this, Dr Ludgate stated that the audit was an extremely useful tool in showing that the Agency was doing all possible to arrive at correct decisions.

The Chairman thanked Dr Ludgate for her paper and further thanked the individual Members who had taken part. He stated that the audit was a great help to both the Agency and Industry.

7. Vignettes:

i A smoking wheelchair: Oral presentation by Alan Lynch

Mr Lynch gave a presentation of on three recent incidents, including one fatality, of powered wheelchairs overheating and burning.

Regarding the two incidents that happened in Scotland, the investigations were being led by the Health and Safety Executive and the Procurator

Fiscal/Police. The Agency would be meeting with them to look at the findings so far.

For the third incident, which occurred at Manchester Airport, the Agency was working with the Civil Aviation Authority, with particular emphasis on guidance for carrying powered wheelchairs on aeroplanes.

It was probably a factor, in all these cases, that the joystick control did not operate as a conventional “dead mans handle”, but would stay in an “on” position when the user, or some outside agency, was pressing against it.

In response to questions from the committee, Mr Lynch gave the following responses:

- Was it not possible for the chair to make a noise that would only be silenced once the power was switched off? Such chairs had once been common but the noise provoked a high level of user complaints.
- Should not the batteries be taken out of the chairs when not in use? The size and weight of the batteries made this extremely difficult for users and their carers, given that many of them were elderly and frail
- Was it not possible for the seat belt to form part of the power circuit, so that it would automatically shut down the power when released? This would give rise to many more opportunities for system failure.

The Chairman thanked Mr Lynch for his presentation.

ii **A case of faulty chips:
Presentation by Christopher Brittain (08/028)**

Dr Brittain gave a presentation on a new retinal implant designed for patients who had lost their vision due to retinal photoreceptor diseases.

The Chairman thanked Dr Brittain for his presentation.

iii **Histology slide staining automated processor:
Oral presentation by Mojisola Ajeneye**

Mrs Ajeneye gave a presentation on a problem arising with a machine used in processing Immunohistochemistry. In situ hybridization and fluorescence in situ hybridization tests. It had been found that the heater element could separate from the heating pad causing slides not being heated to the correct temperature. This could lead to incorrect results while not displaying any error message.

In June 2008, the manufacturer issued a field safety notice advising users to monitor continued working of the heating pads and to use temperature verification slides to detect faulty pads.

In addition, French, but not UK, customers were issued a letter advising on the re-evaluation and confirmation of previous results.

After receiving expert advice, the Agency issued a Medical Device Alert (MDA/2008/069) on 29 September. The manufacturer's timeframe to repair units was changed from January 2009 to November 2008. There will be follow up on manufacturer reconciliation and root cause

The Chairman thanked Mrs Ajenaye for her presentation.

iv **Crushing X-ray: Oral presentation by David Grainger**

Mr Grainger gave a presentation on a fatal incident, involving a remote control x-ray system, which occurred in a German hospital in January 2006. An 84-year old female patient was crushed by the downward movement of the machine.

The investigation, by the German Competent Authority (BfArM), found that, while there was no fault in the system itself, the unintended motion was caused by a paper manual, placed on top of the remote console, falling and activating the remote console joystick.

This remote control design is common to many manufacturers. Systems of this age do not have collision protection for *vertical* diagnostic procedures, e. g. in bed exposures, for which the table top is tilted up and the X-ray tube is turned 90 degrees.

BfArM recommended that manufacturers modified the affected systems by corrective measures. The four manufacturers concerned took the following actions:

- One added a footswitch which had to be used in tandem with the joystick.
- Another added a protective housing above the joystick.
- The remaining two sent letters to all users warning them not to store manuals etc. on shelving above the consoles.

Mr Grainger confirmed that all UK action had been completed and the Chairman thanked him for the presentation.

8. **Reappointment of CSD**

The Chairman reminded members that the Committee was established 8 years ago and members can serve for a maximum of two terms consecutively. All those who will have served for 8 years, including the Chairman, will have to leave. All those members who will have served for four years have accepted the invitation to serve for another term of four years. The Appointments Commission will be conducting an advertising campaign to fill the remaining vacancies. The name of the new Chairman had been forwarded to the Secretary of State for ratification. The last meeting of the current committee will be March 2009.

9. **Any other business**

"Devices in Practice" for pharmacists?

Dr Ludgate brought to the attention of the group the document "Devices in Practice" and indicated that it would be circulated to GPs and Pharmacists, in the latter case with a covering letter from the President of the Royal Pharmaceutical Society.

10. Date and time of next meeting

The next meeting will be held on **Friday 6 March 2009.**