

## **Guidance for surgeons, anaesthetists, dentists and their teams in dealing with patients infected with HTLV III.**

### **Contributors**

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ACQUIRED IMMUNE DEFICIENCY SYNDROME

AIDS

BOOKLET 3

GUIDANCE FOR SURGEONS, ANAESTHETISTS, DENTISTS  
AND THEIR TEAMS IN DEALING WITH PATIENTS  
INFECTED WITH HTLV III



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Your reference: To: All Doctors  
 Our reference: Regional Medical Officers  
 District Medical Officer  
 General Managers of Special Health Authorities  
 for the London Postgraduate Teaching Hospitals

23 April 1986

Dear Doctor

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS): GUIDANCE FOR SURGEONS,  
 ANAESTHETISTS, DENTISTS AND THEIR TEAMS IN DEALING WITH PATIENTS  
 INFECTED WITH HTLV 111

The primary objective of this letter is to provide information and advice for surgeons, anaesthetists, dentists and their teams carrying out procedures on patients with specific antibodies to HTLV 111. However it is hoped that it will be useful for other clinical staff who carry out procedures which could bring them into contact with blood, semen, saliva or other body fluids in circumstances which may place them at risk.

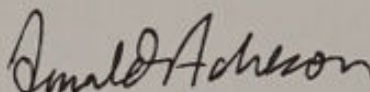
The advice should be taken in conjunction with that contained in "General Information for Doctors" (CMO(85)7) and the Blue Booklet 2 "Information for Doctors concerning the introduction of the HTLV 111 antibody test" (CMO(85)12).

It is a matter for the person undertaking any such procedures to decide what degree of risk is involved so that the prophylactic measures appropriate to the occasion are used.

An important message in the guidance is that there is increasing evidence that HTLV 111 is not easily transmitted as a result of clinical procedures. However it is essential that a high standard of such procedures must be observed by health care personnel in order to reduce exposure to infectious material and thereby minimise the risk of transmission of the virus. HTLV 111 is readily inactivated by heat and disinfectants (see paras 3.14, 3.15, 6.10, 6.11).

I would like to take this opportunity to ask you to enquire of any of your patients found to be HTLV III antibody positive if they have ever donated blood. If so it would be helpful to discuss this in an appropriate confidential manner with your Regional Transfusion Director.

Yours sincerely



E D ACHESON  
DM FRCP FFCM FFOM

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01 407 5522 Ext 6768/6949 (Medical)  
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Further copies of this letter and booklet and the other AIDS Booklets mentioned are obtainable from DHSS Store, Health Publications Unit, No 2 Site, Manchester Road, Heywood, Lancs OL10 1PZ. They are not available from the enquiry points mentioned above. It will be necessary to quote the reference CMO(86)7, for this booklet and CMO(85)7 and CMO(85)12 for the earlier booklets.

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Chapter 1: Introduction

Chapter 2: The history of HIV and AIDS

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## SUMMARY OF THE GUIDANCE

This summary must be read in conjunction with the rest of the Guidance.

S.1 HTLV III infection is not easily transmitted but health care personnel should take steps to see that the procedures described in this guidance are followed in order to minimise exposure to infectious material and to reduce the risk of transmission of HTLV III. The procedures described amount to little more than what are usually regarded as part of good clinical practice.

S.2 HTLV III can be transmitted by blood, blood products and semen. The virus has also been isolated from saliva, tears and breast milk. It may occur in other body fluids and could possibly be spread by these.

S.3. Although HTLV III is not as easily transmissible as is Hepatitis B and is readily inactivated by heat and disinfectants, it is prudent to take measures along similar lines to those taken for that condition.

S.4 Although the most likely potential method of transmission of HTLV III to health care personnel is by the percutaneous inoculation of infected blood by a contaminated needle, other sharp instrument or broken glass, evidence is accumulating that transmission of infection following such accidents is rare

S.5 Protective clothing for surgeons, anaesthetists, dentists and other health care personnel caring for HTLV III antibody positive patients are described in chapters 2.5, 3.10, 3.12, 4.4, 4.5, 4.8, 6.7.

S.6 Open cuts, fresh abrasions, other open skin lesions and sites of vascular access on HTLV III antibody positive patients or on health care personnel attending them must be covered with waterproof or other suitable dressings.

S.7 Special care should be taken when dealing with contaminated equipment particularly if any sharp instruments are to be handled.



S.8 Contaminated gloves, disposable gowns and containers, swabs etc should be double bagged, labelled with a hazard warning and incinerated according to approved local practice. Glassware should be autoclaved before either being recycled or discarded if disposable.

S.9 Disinfection of external surfaces of equipment, bench surfaces etc that may have been contaminated and cannot be autoclaved is described in chapter 3.14.

S.10 The handling of contaminated linen and similar non disposable items is described in chapter 3.15.

## 1. INTRODUCTION

### 1.1 Advice and Guidelines previously issued

Advice concerning the Acquired Immune Deficiency Syndrome (AIDS) has already been issued as ACDP Guidelines 1 HC(85)2 (in Scotland reference SHHD/DS(85)10 and in Wales reference WHC(85)4) and as the Blue Booklet 'AIDS - General Information for Doctors' in England and Wales. The latter was enclosed with a letter from the Chief Medical Officers (reference CMO(85)7 in England and Wales and SHHD/CAMO/(85)8 in Scotland). Further advice in Blue Booklet 2 'Information for Doctors concerning the introduction of the HTLV III Antibody Test' was enclosed with a second letter from the Chief Medical Officers (reference CMO(85)12 in England and Wales and SHHD/CAMO(85)16 in Scotland). Some of the information covered in CMO(85)7 has been updated in this guidance.

### 1.2 The aim of this Guidance

This guidance is intended for Surgeons, Anaesthetists, Dentists and their teams and may also be of use to other health care personnel who undertake invasive procedures. The most important point is that clinical procedures of a high standard must be used when treating all patients who may be infectious including those who are HTLV III antibody positive.

## 2. THE INFECTIVITY OF HTLV III ANTIBODY POSITIVE PATIENTS AND TRANSMISSION OF INFECTION IN THE HEALTH CARE ENVIRONMENT

2.1. On the basis of present knowledge, all HTLV III antibody positive individuals should be considered capable of transmitting the infection. They are likely to remain infected for life. Experience to date both in the UK and the USA indicates that HTLV III infection is not easily transmitted to health care personnel who care for patients who are HTLV III antibody positive. Nevertheless, because of the serious nature of the infection, clinical procedures of a high standard must be carried out to minimise exposure to infectious material and to reduce the risk of transmission of HTLV III.

2.2. Whilst HTLV III has been isolated from blood, semen, tears, breast milk and saliva, infection appears to be transmitted principally by sexual intercourse - or by the transfusion or inoculation of contaminated blood or blood products. HTLV III appears to be less easily transmissible than the Hepatitis B virus and is readily inactivated by heat and disinfectants as described below. HTLV III infection can be transmitted by blood, blood products, semen and from infected mother to fetus during pregnancy or at birth. The virus has been also isolated from saliva, tears and breast milk and may occur in other body fluids and though it could possibly be spread by these, there is no substantial evidence to indicate this is so. Virus in semen may be important in relation to certain surgical procedures. Faeces, vomit, sputum, urine and pus should be considered as possible hazards when they are contaminated with blood.

2.3. There is no evidence that social contact with HTLV III positive individuals presents a risk of transmission of infection. Furthermore, there is no evidence that the infection is transmissible by airborne droplets resulting from coughing or sneezing, nor by sharing washing, eating and drinking utensils, other articles in general use or the sharing of toilet facilities.



2.4. Transfusion or inoculation of infected blood. The virus has been isolated from the blood of HTLV III antibody positive individuals and the infection has been transmitted by the transfusion of contaminated blood and blood products. The most likely potential method of transmission of HTLV III to health care personnel is by the percutaneous inoculation of infected blood by a contaminated needle, other sharp instrument or broken glass. The risk of health care workers acquiring HTLV III infection has been evaluated in several studies in the United States (MMWR 34(45)1985). Six hundred and sixty six health care workers had direct parenteral (needlestick or cut) or mucous membrane exposure to fluids, especially to blood, from patients with AIDS or HTLV III infection. None of the workers who were initially HTLV III antibody negative seroconverted following this exposure. Twenty six of the group were seropositive when tested. However, all but three of these belonged to a recognised risk group for AIDS . Of the remaining 3 workers, 2 had neither a pre-exposure or early post-exposure sample to help determine the onset of infection and there was no information available on the third. The development of a positive HTLV III antibody test in a nurse has been reported in the UK following a severe needlestick injury which involved the injection of a small amount of blood from a patient with AIDS. A prospective study of health care workers in the UK by CDSC was started in January 1985.

2.5. As HTLV III could possibly be transmitted via small scratches, cuts, bites, or burns or via the conjunctiva or abrasions in other mucous membranes, health care personnel should wear gloves, masks and protective eyewear as well as a disposable plastic apron under a gown or a suitable alternative if there is a risk of becoming contaminated with possibly infected material during invasive anaesthetic, surgical or dental procedures. During simple clinical procedures on the ward and elsewhere, health care personnel need only wear a plastic apron and gloves when handling blood and other body fluids.



2.6. Transfer of infected material from contaminated work surfaces, equipment, instruments etc to health care personnel could occur and suitable precautions must be taken when working with these.

2.7. Salivary route. HTLV III has been isolated from saliva, although it has not been implicated in the transmission of infection eg following kissing. Nevertheless, in view of the theoretical possibility of transmission and because saliva may be contaminated with blood particularly during dental and other surgical procedures within the mouth, for practical purposes the transmission of HTLV III must be considered a possibility by those exposed to large amounts of saliva during their professional work.

### 3. THE HTLV III ANTIBODY POSITIVE PATIENT IN HOSPITAL

3.1. All health care staff should be informed, in advance if possible, of patients who will be under their care or of material they may be asked to handle which could present a risk of infection. However staff undertaking invasive procedures need to know the precise nature of the risk for example when it is known that a patient is HTLV III antibody positive. Similarly such staff should be informed when a patient is found to be HTLV III antibody positive whilst under their care.

It should be noted that some HTLV III infected individuals who enter hospital or who consult a general dental practitioner, may not have been identified as antibody positive. Nevertheless routine screening of all patients for HTLV III infection is not desirable. If a patient declines to be tested for the purposes of infection control then their clinical management may be based on the assumption that the result of a test would have been positive. As a positive HTLV III antibody test has serious implications, counselling of patients prior to carrying out the test is essential and further counselling must be offered if the test proves to be positive.

#### 3.2. Confidentiality of Health Care Data

The strictest confidentiality must be maintained when a HTLV III antibody positive individual is identified. Where a person is tested for HTLV III infection or its complications and it is thought to have been sexually transmitted, health authorities have an obligation to maintain confidentiality of information under the terms of the National Health Service (Venereal Diseases) Regulations 1974 (SI 1974.9). For all HTLV III positive patients the normal rules of medical confidentiality apply and unless the patient has given his consent, personal health data relating to him must not be disclosed to anyone for any purposes other than the health care of that patient, except where the disclosure is necessary to prevent the spread of infection. Disclosure of this information for other than medical purposes or in the interests of public health could lead to serious consequences for the informant. Adequate safeguards to protect against unauthorised disclosure must be adopted.



3.3. Isolation techniques are needed for HTLV III antibody positive patients when they are bleeding or likely to bleed, are incontinent of body fluids, have open or drained wounds, have a disturbed level of consciousness or have an infection that requires isolation (eg pulmonary tuberculosis). These patients should be nursed in isolation according to the ACDP guidelines<sup>1</sup>, which will usually imply the use of a single room. Health care personnel caring for patients with these complications will ordinarily only need to wear disposable gloves and a plastic apron and, if there is a risk of splashing, protective eyewear. However, health care personnel should wear a disposable plastic apron under a gown or suitable alternative, gloves, mask and protective eyewear if there is a risk of becoming contaminated with possibly infected material during invasive anaesthetic, surgical or dental procedures.

Asymptomatic patients and other HTLV III positive patients who do not fall into the categories mentioned above may be admitted to an open ward and should be allowed the same activities as other patients.

3.4. Normally patients may use communal lavatories and washing facilities unless they are bleeding in which case it is preferable that they should have dedicated facilities and these should be cleaned after each use with a suitable disinfectant.

3.5. Normally patients may use crockery and cutlery which is washed after use in the same way as for other patients unless gross contamination (eg with blood) is likely to occur in which case either disposable types should be used or the crockery and cutlery should be heat disinfected in a dish washing machine.

3.6. Resuscitation equipment (eg airway, sucker etc) for each patient should be kept next to the bed. The equipment should be disposable, or if not, then sterilisable preferably by autoclaving (see Appendix).

3.7. Specimens must not be sent to the laboratory without agreement between the clinician and senior laboratory staff. (See chapter 7).

3.8. Particular care should be taken when using needles or sharp instruments on HTLV III antibody positive patients. Needles should not be resheathed after use due to the risk of needlestick injury and disposable equipment should be used whenever possible for parenteral procedures. Special care must be taken in the handling and disposal of cartridges of local anaesthetic and needles used during dental procedures. All needles, cartridges and other sharp instruments must be disposed of in suitable containers (see chapter 7).

3.9. Open cuts, fresh abrasions, other open skin lesions and sites of vascular access on HTLV III antibody positive patients should be covered with waterproof or other suitable dressings.

3.10. Personnel should wear a disposable plastic apron under a gown or suitable alternative and disposable plastic gloves when dealing with blood, secretions and excreta and when mopping up spillages from HTLV III antibody positive patients. When splashing is a possibility (eg open surgery or endoscopic procedures) eye protection must be worn and eye wash bottles should be available.

3.11. Open cuts, fresh abrasions and other open skin lesions on health care personnel must be covered with waterproof dressings whilst caring for HTLV III antibody positive patients.

3.12. When dealing with contaminated equipment, personnel must wear a disposable plastic apron under a gown or suitable alternative and gloves. Further protection eg mask and protective eyewear may be advisable if splashing is a possibility. Special care is required if any sharp instruments are to be handled as gloves provide no protection.



3.13. Contaminated gloves, disposable gowns and containers, swabs etc must be double bagged, labelled with a hazard warning and incinerated according to approved local practice. Glassware must be autoclaved before being either recycled or discarded if disposable.

3.14. Bench surfaces and external surfaces of equipment, that have been contaminated and cannot be autoclaved must be treated with freshly prepared sodium hypochlorite 10,000 ppm available chlorine (household bleach/diluted 1 part bleach to 10 parts water) and left in contact with it, where possible, for 30 minutes. Other external surfaces of non-disposable equipment where only suspected contamination has occurred must be wiped with a lower concentration of hypochlorite (1000 ppm available chlorine) or freshly prepared 2% glutaraldehyde.

Hypochlorite may damage metal surfaces and fabric. Freshly prepared 2% glutaraldehyde (eg Asep, Cidex or Totacide) can be used to soak non-disposable equipment that cannot be autoclaved. The equipment must first be decontaminated in 2% glutaraldehyde for 1 hour and then this solution discarded. Then the equipment should be physically cleaned with detergent and warm water to remove all blood and other organic matter, rinsed and left to soak in 2% glutaraldehyde for 3 hours. The advice does NOT extend to items contaminated during the treatment of the smaller number of patients with established acquired immunodeficiency syndrome (AIDS), or any of the conditions resulting from HTLV III induced immunocompromise. This is because in such cases the precautions taken must include measures to deal with any one of a number of other potentially pathogenic microbes (in addition to the HTLV III) that may be causing infections in the patient. Although the recommendations made here would deal adequately with most of the opportunistic pathogens that might be involved, this must not be assumed, and a separate assessment of the precautions to be taken should be made in each case. If necessary, the advice of a Control of Infection Officer should be sought.

3.15. In hospitals contaminated linen must be contained in a water soluble plastic bag (either alginate stitched or polyvinyl alcohol (PVA)) clearly labelled and double bagged according to local practice for infected linen. The linen must not be sorted in the laundry, but the

bag transferred directly into the hot wash of a washing machine and washed at the temperature designated for infected laundry, at present 93°C for 10 minutes. This is currently under review and likely to be amended. Outside hospitals, all non-disposable items such as gowns, white coats and towels may be safely washed in the hot wash of an ordinary washing machine. The washing temperature should be 90°C for 10 minutes. The temperature employed in the cycle is adequate to inactivate the virus, therefore decontamination of the washing machine is not necessary.



#### 4. SURGERY OF HTLV III ANTIBODY POSITIVE PATIENTS

4.1. All theatre staff involved in an operation should be informed when an HTLV III antibody positive patient is to undergo surgery.

4.2. It is unnecessary to designate a theatre and staff solely for operations on infected patients. The precautions required will be similar to those taken currently for operative procedures on patients deemed 'dirty' including those with Hepatitis B. Infected patients who require surgical treatment should be dealt with separately or at the end of a surgical list to enable the operating theatre and anaesthetic room (if used-see chapter 5) to be cleaned, prior to reuse.

4.3. The patient trolley and theatre table should have a surface (eg laminate) that can readily be cleaned with disinfectant (see chapter 3.14). The trolley and the table should be covered with a water repellent sheet and a disposable sheet on top.

4.4. All health care personnel in the surgical team must wear a disposable plastic apron under a disposable gown or suitable alternative, mask and gloves. Protective eyewear must be worn if there is any danger of splashing with possibly infectious material.

4.5. When handling contaminated equipment, personnel must wear a disposable plastic apron under a gown or suitable alternative. Further protection eg mask and protective eyewear may be advisable if splashing is a possibility. Special care is required if any sharp instruments are to be handled as gloves provide little protection.

4.6. If blood or other possibly infectious material is spilt during the operation outside the operative field, it must be cleaned by saturating with a solution of sodium hypochlorite containing 10,000 ppm of available chlorine (household bleach/diluted 1 part bleach to 10 parts water) and then wiping with disposable paper towels.

4.7. During Obstetrical and Gynaecological surgical procedures (including deliveries) on HTLV III antibody positive women, the same precautions and procedures recommended for other surgical procedures

should be used. Lochia will be contaminated with blood and should be treated as possibly infectious. The placenta should be disposed of in the same way as other contaminated material. Breast milk from an antibody positive mother may contain HTLV III and therefore such breast milk should not be used to breast feed and must not be used in a milk bank.

4.8. During Ophthalmic surgical procedures on HTLV III antibody positive patients, the same precautions and procedures recommended for other surgical procedures should be used because tears may contain HTLV III. Eye examinations or other procedures involving contact with tears should be performed by health care personnel wearing disposable gloves. Masks, gowns and protective eyewear are required only when performing invasive (eg operative) procedures or when there is any danger of splashing. The following recommendations are adapted from the advice of CDC, Atlanta, (MMWR, 30 August Vol 34 No 34 pages 533-534 (1985)) and should be followed:

Instruments that come into direct contact with the external surface of the eye should be wiped clean and then treated with (i) a 10 minute exposure to a fresh solution of 3% hydrogen peroxide; or (ii) a fresh solution of sodium hypochlorite containing 10,000 ppm of available chlorine and left in contact, where possible, for 30 minutes; or (iii) 70% ethanol; or (iv) 70% isopropanol. The instrument should be thoroughly rinsed in water and dried before reuse. Personnel handling contaminated equipment should observe the precautions outlined in chapters 4.4, 4.5.

4.9. All equipment used should, if possible, be disposable or if not then sterilisable preferably by autoclaving (see Appendix). After the operation, external surfaces (eg theatre table) that may have been contaminated and cannot be autoclaved, must be disinfected (see chapter 3.14).

4.10. Handling of contaminated disposable items is discussed in chapter 3.13 and of contaminated non disposable linen and similar items in chapter 3.15.



4.11. Additional details about preparing the theatre before and disinfecting and cleaning the theatre after the operation that may be helpful to health care personnel are given in the report of the Royal College of Nursing AIDS Working Party<sup>2</sup>.

4.12. During operative procedures on HTLV III antibody positive patients the surgeon and others in the theatre will be at risk from cuts, needle pricks and splashing of possibly infectious material. Cuts and abrasions in the skin should be washed in running water with soap, or if available in antiseptic suitable for skin. Bleeding should be encouraged by local venous occlusion. Splashes on to mucous membranes should be treated as soon as practicable by washing in cold running water. Eye wash bottles should be available during invasive procedures.

4.13. Surgical specimens taken for histopathology etc should be dealt with by prior arrangements with the laboratory. Handling should be reduced to a minimum and processing carried out according to ACDP Guidelines<sup>1</sup>.

## 5. ANAESTHETICS ON HTLV III ANTIBODY POSITIVE PATIENTS

5.1. The advice given in other parts of this Guidance is also relevant to anaesthetic practice and should be read in conjunction with this chapter.

5.2. Precautions taken should be along similar lines to those currently taken for patients with Hepatitis B.

5.3. The patient should be induced in the operating theatre (if practicable) in order to avoid extra cleaning of the anaesthetic room.

5.4. All equipment used (eg masks, oral and nasopharyngeal airway pieces and corrugated tubing for anaesthetic machines or ventilators) should, if possible, be disposable or, if not, then sterilisable preferably by autoclaving (see Appendix). Treatment of non disposable equipment and external surfaces is discussed in chapter 3.14.

5.5. Great care is required at sites of vascular access and these should be covered with a waterproof or other suitable dressing.



## 6. DENTISTRY ON HTLV III ANTIBODY POSITIVE PATIENTS

### General

6.1. General dental practitioners should be able safely to treat HTLV III antibody positive patients in their surgeries by following the precautions outlined in this guidance which are similar to those which should be taken for patients with Hepatitis B. There may be occasions when a dentist will wish to establish whether a particular patient is HTLV III antibody positive. In such cases the procedure is for the patient to be referred to their own medical adviser who will arrange for counselling and, if appropriate, the necessary test. If, in these circumstances, such a person does not wish to be tested, then they may be treated on the assumption that the test is positive.

6.2. Clinical techniques of a high standard such as are used to avoid transmission of any infection should be practised by all involved in dental procedures on all patients.

6.3. General dental practitioners should remember that they have responsibility for the protection of all their employees including dental hygienists and dental surgery assistants. Dental hygienists must take the same precautions as dentists during dental procedures on HTLV III antibody positive patients.

6.4. Only dental staff who are directly involved in dental procedures on these patients need be informed in advance that the patient is HTLV III antibody positive. Special precautions are not required for these patients in the waiting room. The patient's appointment should be made at the end of the day's list.

6.5. Dental procedures requiring a general anaesthetic will require the procedures outlined in Chapter 5 to be followed.

## Precautions to be taken

6.6. Open cuts and fresh abrasions or other open skin lesions on dental personnel should be covered with waterproof or other suitable dressings whilst caring for HTLV III antibody positive patients.

6.7. Protective clothing, including gowns and gloves must be worn by those dental personnel directly involved in dental procedures and in view of the aerosols containing blood and saliva that may be generated by low and high speed dental drills, ultrasonic scalers and irrigation/air syringes, the wearing of protective eyewear and masks is essential. High volume evacuation systems must be used and conventional scaling techniques are recommended.

6.8. Disposable equipment and materials should be used whenever possible including napkins, mixing surfaces and mouthwash containers. Disposable needles must be used. A fresh cartridge of local anaesthetic must be used on each patient.

6.9. All instruments used that are not disposable should be sterilisable, preferably by autoclaving (see Appendix). Sterilisable handpieces must be used.

6.10. Freshly prepared 2% glutaraldehyde (eg Asep, Cidex or Totacide) can be used to soak non-disposable instruments and equipment that cannot be autoclaved. These should first be decontaminated in 2% glutaraldehyde for 1 hour then this solution discarded. The equipment should then be physically cleaned in detergent and warm water to remove any organic matter, rinsed and then left to soak in 2% glutaraldehyde for 3 hours.

6.11. External surfaces of equipment and contaminated working surfaces that cannot be autoclaved must be treated with freshly prepared sodium hypochlorite 10,000 ppm available chlorine (household bleach/diluted 1 part bleach to 10 parts water) and left in contact with it, where possible, for 30 minutes before rinsing and drying. Hypochlorite may damage metal surfaces and fabric. These should be swabbed down with



a solution of 2% glutaraldehyde and left in contact with it, if possible, for 3 hours before rinsing and drying. Other external surfaces where only suspected contamination has occurred must be wiped with a lower concentration of hypochlorite (1000 ppm available chlorine) or freshly prepared 2% glutaraldehyde.

Spittoons, receivers and evacuation systems should be cleaned and flushed after each patient with a solution of 2% glutaraldehyde. After the last patient, 2% glutaraldehyde should be added to the vacuum system collector and left for a minimum of three hours.

6.12. When handling contaminated equipment, personnel should wear a gown and gloves and, if there is any risk of splashing, a mask and protective eyewear. Special care is required if any sharp dental instruments and needles are to be handled as gloves provide no protection. Care will be required when removing needles from dental cartridge syringes. These, together with other disposable sharp instruments and used dental cartridges should be placed in a suitable container for disposal. [see chapter 7]

6.13. Impressions should be taken in a silicone based material. These, together with dentures and other appliances to be sent to the laboratory should first be decontaminated in 2% glutaraldehyde for 1 hour. They should then be rinsed and transferred to a fresh solution of 2% glutaraldehyde and left to soak for a further 3 hours or overnight if more convenient. The prolonged immersion will not affect the dimensional stability of impressions taken in a silicone based material.

6.14. Disposable material must be used to provide intra-oral X-ray film support. The Radiographer should be forewarned and wear disposable gloves.

6.15. All disposable materials, napkins etc should be double bagged in plastic bags and safely disposed of, preferably by incineration. For procedures in hospitals see chapter 3.13.

6.16. Dental personnel directly involved in dental procedures should wear a gown which can withstand a washing temperature of 90°C for 10 minutes. All non-disposable items such as gowns, white coats and towels may be safely washed in the hot wash of an ordinary washing machine. The washing temperature should be 90°C for 10 minutes. The temperature employed in the cycle is adequate to inactivate the virus, therefore decontamination of the washing machine is not necessary. In hospitals these items should be double bagged and clearly labelled according to the approved local practice for infected linen which is contained in a water soluble plastic bag (either alginate stitched or Polyvinyl alcohol (PVA) and washed at the temperature designated for infected laundry, usually 93°C for 10 minutes. This is currently under review and likely to be amended.



7. SPECIMENS FOR LABORATORY INVESTIGATION FROM PATIENTS WITH AIDS  
OR SUSPECTED OF BEING HTLV III ANTIBODY POSITIVE

If specimens for laboratory investigation are taken from a person suspected of having AIDS or being HTLV III antibody positive then the following procedures should be observed. They are based on the ACDP Guidelines<sup>1</sup> which should also be consulted.

(i) HTLV III has now been isolated from whole blood, cell free serum and plasma, breast milk, semen, saliva, tears, urine, cerebrospinal fluid and a brain biopsy. Although there have been no reports of the virus appearing in faeces it is reasonable to assume that they too are a potential source of infection if contaminated with blood. Although HTLV III is obviously disseminated widely throughout the body, there is no record to date of infection having occurred other than from blood, blood products, semen and possibly breast milk.

(ii) Particular care must be exercised when needles and other sharps are to be used in the collection of specimens from patients known to be infected with HTLV III and from those who can be identified as belonging to one of the high risk groups. Blood, body fluids and tissue specimens should be taken only by trained and experienced staff who must wear gloves, gowns or aprons and when there is a risk of splashing, eye and mouth protection. Needles must be removed most carefully from syringes without resheathing them (approximately 40% of self-inoculation accidents occur in resheathing needles) and the fluid gently discharged into its container avoiding external contamination. If this does occur it must be dealt with by disinfection. All disposable sharps must immediately be placed in a puncture-proof bin\* which is suitable for incineration and which must not be overfilled. Non-disposable items should be placed in a suitably secure enclosure for disinfection or sterilisation. Surface soiling at the site must be disinfected promptly.

\*See "Specification for Containers for Disposal of Used Needles and Sharps Instruments" DHSS TSS/S/330.015 December 1982.

(iii) After checking the security of the closure, specimens must be labelled by whatever system is recognised locally to indicate a risk and a danger of infection. Labelled specimens must be sealed in individual plastic bags without the use of pins, staples or metal clips. The accompanying request forms must clearly indicate knowledge or suspicion of HTLV III infection and must be kept separate from the specimen containers to avoid contamination.

(iv) Specimens should not be sent to laboratories without an agreement between the clinician and senior laboratory staff and it is the clinician's duty to ensure that all those who need to know are warned of the risk.

(v) If HTLV III specimens are to be sent by inland post, the inner wrapping, the specimen container and the request form must all be marked so as to indicate the danger of infection. No material should be sent without the agreement of the receiving laboratory and it must be packed in accordance with the recognised regulations for the postal transmission of any pathological specimen. Details of the packing and outer labelling required for inland postage are given in the Post Office Guide. It is prudent to take note of any change in postal requirements by regular reference to the latest edition of the Guide. For international postage, the revised conditions required by the Infectious Perishable Biological Substance Service (jointly agreed by the International Air Transport Association (IATA) and by the Universal Postal Union must be observed. Details may be obtained from Postal Headquarters, 33 Grosvenor Place, London SW1X.



## 8. ACCIDENTAL INOCULATION OR CONTAMINATION

8.1. In the event of accidental inoculation or when personnel get blood, saliva or other infectious material from a HTLV III antibody positive patient into the eye or mouth, the affected area should be washed with running water. A cut or abrasion in the skin that is inoculated should be washed in running water with soap or, if available, an antiseptic suitable for skin and bleeding encouraged by local venous occlusion. The possibility of transmission of other infections (eg Hepatitis B) should also be considered.

8.2. Accidental inoculation or contamination should be reported to the senior member of staff with overall responsibility for the work and responsible for recording accidents and to the Control of Infection Officer. Additional advice should be sought immediately where appropriate from a physician with an interest in HTLV III infection. The Communicable Disease Surveillance Centre (CDSC) and the Communicable Diseases (Scotland) Unit are conducting a survey of accidental needlestick injury and other incidents of accidental contamination with HTLV III and should be contacted for details (CDSC Tel 01-200-6868 or CD(S)U Tel 041-946-7120).

8.3. General dental practitioners or their staff who sustain an inoculation injury should immediately take the measures described in chapter 8.1 and immediately contact a local physician with an interest in HTLV III infection. The local District Medical Officer or the Medical Officer of Environmental Health or in Scotland, the Community Medical Specialist (Communicable Diseases and Environmental Health) at the local Health Board will advise if required which physician to consult.

#### REFERENCES.

1. Advisory Committee on Dangerous Pathogens. AIDS - Interim Guidelines DHSS HC(85)2. (A revised version will be published in 1986 and this should be consulted when available.)
2. First report of the Royal College of Nursing AIDS Working Party: Nursing guidelines on the management of patients in hospital and the community suffering from AIDS. RCN 20 Cavendish Square, London W1M 0AB. (This will be revised in 1986).
3. The Report of the Expert Group on Hepatitis in Dentistry HMSO (1979).

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## APPENDIX

### STERILISATION OF INSTRUMENTS ETC

(a) All non-disposable instruments should be sterilised immediately by saturated steam in an autoclave eg at 2.2 bar, 134°C maintained for a minimum of 3 minutes, or by hot air, eg at 160°C for 1 hour. References: HEI no 88 page 31 September 1980 and in The Report of the Expert Group on Hepatitis in Dentistry HMSO (1979).

(b) Disposable used instruments that cannot be incinerated or otherwise sterilised must be autoclaved before being discarded.



