INTERNATIONAL ACUPUNCTURE ASSOCIATION OF PHYSICAL THERAPISTS

(IAAPT)

GUIDELINES FOR SAFE ACUPUNCTURE AND DRY NEEDLING PRACTICE

DECEMBER 2016

A SUB GROUP OF WCPT

WCPT represents the
Physical Therapy Profession Worldwide

GUIDELINES FOR SAFE ACUPUNCTURE

AND DRY NEEDLING PRACTICE

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This document was produced by a Sub-Group of the IAAPT committee in consulation with the IAAPT Committee for discussion at the AGM of IAAPT at the WCPT Congress 2015 in Singapore. IAAPT consulted the PAANZ Guidelines (2014) which were made available to us. APA Guidelines (2013) were also consulted We are very appreciative of the all the work which has been undertaken by Susan Kohut and Jill McDowell (PAANZ) , Leigh McCutcheon and Paula Yacoub of APA.

IAAPT was founded at the 11th World Confederation of Physical Therapists (WCPT) Congress held in London, August 1991. It provides an international network of Physical Therapists/Physical Therapists interested in Acupuncture. It also provides support for individuals as well as groups, to help establish Acupuncture practice in their countries. IAAPT was given official Sub-Group status by WCPT in 1999.

This document is designed to be used as a guide to safe practice by Physical Therapists practicing Acupuncture as members of IAAPT. These guidelines assist the Physical Therapist to identify treatment risks and take adequate precautions for the identified risk. Physical Therapist should limit Acupuncture and Dry Needling practice to areas of education, competence and experience.

The objective of these guidelines is on safe Acupuncture practice and the prevention and control of infection in Acupuncture and Dry Needling practice. The guidelines are not prescriptive; rather taking a risk management approach. These guidelines assist the Physical Therapist to identify infection risks and to take adequate precautions for the identified risk.

The IAAPT guidelines are not intended to replace the National, State, Territory or Local guidelines. They are provided to complement, National, State, Territory or Local guidelines pertinent to Acupuncture and Dry Needling.

The key documents consulted are outlined below.

1. International Acupuncture Association of Chartered Physical Therapists (IAAPT, 2003) www.iaapt.wcpt.org
2. The Physiotherapy Acupuncture Association of New Zealand (PAANZ, 2014) www.paanz.org.nz
3. Australia Acupuncture and Dry Needling Group (ADNG,2013) www.acupuncturephysio.org
4. British Acupuncture Council Code of Safe Practice (BAcC,2010) www.acupuncture.org.uk
5. Proposed Guidelines on Infection Control related to Acupuncture (Hong Kong, 2014)
6. Irish Society of Chartered Physical Therapists Guidelines for Acupuncture (ISCP, 2012) info@iscp.ie
7. Irish Society of Chartered Physical Therapists Guidelines for Dry Needling (ISCP, 2012) info@iscp.ie
8. American Academy of Orthopaedic Manual Therapists (AAOMPT, 2009) Position Statements- Dry Needling http://www.aaompt.org/about/ statements
9. WHO Traditional Medicine Strategy 2014-2023. www.who.int/medicines/publications/traditional/trm_strategy14_23/en/Cached

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INTRODUCTION

This documentation is a guideline for safe Acupuncture practice for members of the International Acupuncture Association of Physical Therapists (IAAPT), a subgroup of the World Confederation for Physical Therapy (WCPT).

The guideline is an amalgam of the previous IAAPT Guidelines, (2003-2013), Physiotherapy Acupuncture Association of New Zealand (PAANZ) Guidelines (2014), Australian Acupuncture and Dry Needling Group Physical Therapists (ADNG) Guidelines (2013) of the Australian Physiotherapy Association (APA), Hong Kong and international Acupuncture guidelines. It incorporates information from the most recent international research papers as well as the minimum standards set by the International Acupuncture Association of Physical Therapists (IAAPT). The guidelines will be reviewed and revised by IAAPT as required. Some countries may have their own additional rules of practice that members are expected to follow. These should be notified to IAAPT.

Physical Therapists/Physical Therapists may practice Acupuncture under any of the following paradigms: Traditional Chinese Acupuncture, Western Acupuncture, and/or Trigger Point Dry Needling. For the purpose of this document these are defined as follows:

“Acupuncture” refers to the insertion of a solid needle into any part of the human body for disease prevention or therapy. Techniques in which any substance is injected through a hollow needle are not considered to be Acupuncture, nor are treatments that do not include piercing the skin (BMAS 2006/2009).

Traditional Chinese and East Asian Acupuncture (TA):
Utilisation of meridian or extra points based on an East Asian medical approach which includes diagnosis and clinical reasoning using various Chinese medicine assessment methods and/or paradigms. Utilisation within the context of physiotherapy will include a diagnosis based on clinical reasoning as part of an overall management approach.

Western Acupuncture (WA):
Western Acupuncture utilises meridian points but applies it to western scientific reasoning with particular consideration to neurophysiology and anatomy. It does not utilise any traditional Chinese medicine assessment methods or paradigms. Utilisation within the context of physiotherapy will be based on clinical reasoning as part of an overall management approach.

Trigger Point (TrP) /Dry Needling (DN);
Rapid, short term needling to altered or dysfunctional tissues in order to improve or restore function. This may include (but is not limited to) needling of myofascial trigger points, superficial Dry Needling, needling of periosteum and connective tissues. It may be performed with an Acupuncture needle or any other injection needle without the injection of a fluid. This is a practice utilised by both traditional and Western Acupuncturists.

All of these practices may be utilised within the context of physiotherapeutic clinical reasoning as part of an overall management approach.

Acupuncture and TrP/Dry Needling involve dermal penetration with a solid filament needle to varying depths within the body for therapeutic indications. Thus Acupuncture safety studies assist as a suitable framework for understanding the potential risks for DN. In this context safety concerns can be considered to be similar. (ISCP, DN Guidelines, 2012). It is important that IAAPT members be cognisant of the risks associated with needling therapies for patient selection, obtaining consent, safe treatment application and management.

PRINCIPLES OF SAFE PRACTICE

These standards are set specifically for Physiotherapists/ Physical Therapists practising Acupuncture and TrP/Dry Needling.

It has been assumed that all Physiotherapists/ Physical Therapists are members of the professional body in their member country which in turn is a Member Organisation (MO) of the WCPT. It is further assumed that as members of such a Professional body, they are bound by Professional Rules of Conduct which ensures safe care for their patients.

The IAAPT Guidelines (June 2003) recommended that countries work towards a basic training of 80 hours of relevant study in line with the WHO recommendations.

All Physical Therapists who are practising Acupuncture and Dry Needling should have attended an approved (IAAPT or own state/province/country/professional body approved) Acupuncture training programme. In instances of individual membership IAAPT will advise on suitable training programmes or assess suitability of education undertaken. Following the minimum training requirements therapists are recommended to complete at least 30 hours of continuing professional development (CPD) in Acupuncture or Dry Needling every three years to remain competent in this field of practice. It is recommended that a portion of CPD should be practical training.

IAAPT recommend that Physical Therapists should confine their use of Acupuncture and Dry Needling to treatment of conditions within their scope of practice for which they have training and experience. Physical Therapists should practice Acupuncture within their own clinical paradigm and with respect to the level of training they have received. This is particularly pertinent for any needling in the ear, thorax or cervical regions and with the use of Acupuncture during pregnancy, neurological, auto-immune and palliative care.

Physical Therapists must comply with current legislation of any local or national governing bodies (e.g. local councils, government, national registration boards and accreditation bodies). Physical Therapists must also annually comply with information requests from local blood banks for methods of practice. This may vary from region to region.

Physical Therapists should comply with the hygiene requirements and waste disposal guidelines for needles or bodily fluids as outlined in this guide. Physical Therapists should be aware of any further hygiene requirements of employers (e.g. hospital department guidelines). Physical Therapists should be aware of additional requirement for waste disposal of needles or bodily fluids as set by local governing bodies.

Warnings and consent should include details of contraindications and precautions and possible adverse outcomes. Explanation of the Acupuncture mechanisms utilised should be provided to the patient. Written consent for Acupuncture treatment should be obtained on the first visit for any invasive procedure (acupuncture is described as an invasive procedure). Verbal consent noted in the treatment notes at each subsequent treatment is usually sufficient. IAAPT recommends additional written consent in the use of Acupuncture during pregnancy, or if special circumstances apply. For consent to treat a child less than 16 years of age a parent or guardian's consent should be gained. Detailed information regarding consent is provided in the Appendix.

Physical Therapists are expected to know their anatomy and depth of needle insertion before commencing treatment.

To avoid fainting, it is strongly advised that the first treatment always be provided in a lying or half lying position.

Initial Acupuncture patient notes must clearly denote that informed consent was gained, an explanation of the Acupuncture method and the mechanisms utilised were given, the risks of the treatment explained, warnings given and alternative treatment options discussed. Questions are answered in a respectful and

timely manner. Physical Therapists should keep clearly documented records to STRICTA standards. Please note that Acupuncture is described as an invasive procedure hence the above recommendations.

Physical Therapists should comply with the management of needle accidents and adverse reactions guidelines as outlined in this document.

All treatment notes must always state:

- Patient consent to treatment
- All Acupuncture points needled including the time parameters, special insertion methods, stimulation(s) provided, and any warnings given.
- Any adverse effects, any post treatment advice.
- Any positive or negative effects of the treatment given that day or the previous treatment. Invite feedback from patients.

PATIENT EXPLANATION

Explicit informed consent should be gained prior to every treatment. All information must be provided in such a manner that patient understanding is clear. The use of technical language or jargon may impede understanding.

Information should include:

- The procedure of the needle insertion into the skin.
- Inform the patient that sterile, single use, disposable needles will be used.
- A brief explanation of how the type of Acupuncture that is being implemented works for their condition.
- Any additional treatment such as the use of betadine or sterile wipes
- Particular precautions must be explained if relevant
- If using additional stimulation of the needle, such as manual stimulation, electrical stimulation or moxa, this should be discussed with the patient.
- The possibility of transient symptoms during and/or after the treatment, such as point bleeding, bruising, fatigue, light headedness or temporary aggravation of the symptoms should be considered.
- Any advice following the treatment that may be pertinent for the individual patient, such as care with driving after any needling treatment or the avoidance of alcohol (as the effect of alcohol or sedative drugs may be enhanced for some people following Acupuncture treatment) or in regards to the use of heat or local ice following Dry Needling.

The Physical Therapist must monitor treatment and make appropriate checks of the patient.

Patients must be cautioned to not move whilst needles are inserted, or that they or any other person is not allowed to touch, adjust or remove the needles. Advise the patient to call the Physical Therapist if there is a problem. The therapist should stay within earshot during treatment and/or to give the patient a bell. Be aware that some patients will try to use their mobile phones and suggest that the phone be on silent to avoid distraction, disturbance or sudden moves to check the phone activity.

If Acupuncture needles are inserted over the lung field the patient must be cautioned to avoid moving, coughing or sneezing (Appendix 2).

MONITORING OF THESE STANDARDS

IAAPT, through its regional representatives, to keep all countries informed as to changes to these standards. Standards to be reviewed by IAAPT on a regular basis

CONTRAINDICATIONS AND PRECAUTIONS FOR ACUPUNCTURE AND TRIGGER POINT DRY NEEDLING

A good knowledge of anatomy is essential.

PROHIBITED AREAS FOR NEEDLING...

- Prohibited areas for Physical Therapists using Acupuncture techniques include nipples, the umbilicus, the eye and external genitalia
- Scalp areas of infants before the fontanel has closed are prohibited
- Avoid needling into vulnerable pathological sites including varicose veins, acutely inflamed areas, such as cellulitis, areas of unhealthy or infected tissue
- Acupuncture should be avoided in a limb if dissection of lymph nodes has been performed. Japanese Acupuncture using non-insertion techniques may be utilised in this case
- Do not needle into breast tissue or any implant prosthetic tissue
- Never needle into a joint with an orthopaedic implant
- Never needle into a joint space if the patient has a bleeding disorder, such as haemophilia, or is on anticoagulants such as Warfarin, Clexane etc.
- Never needle directly INTO an acutely effused joint or acute haematoma (surrounding the dragon, i.e. surrounding perimeter of a haematoma is excluded)

PROHIBITED PRACTICES...

- Only use sterilised, disposable, sealed needles, never re-sterilise needles (unless a Toyohari practitioner using gold needles and specialist cautions must be provided to the patient)
- Never put your finger or rub over the site where a needle has just been removed. If pressure is required onto the needle site, use a cotton ball or a cotton bud
- Never touch the shaft of the needle when inserting the needle. If required use a secondary shorter guide tube to assist a long needle's insertion. Guide tubes must be pre-sterilised and come packaged with each individual needle or set of needles. They must not be used or stored for use beyond the single treatment session on one patient in which the seal on the package is broken.
- Do not save needles or guide tubes for a patients use at a subsequent treatment
- Never use needles that have been opened prior to treatment
- Never walk about with used needles, needles should be disposed of immediately in a sharps container.
- Do not needle through clothing or any other material, as the area of skin to be treated must be clearly visible to the practitioner.

DANGEROUS OR VULNERABLE POINTS

The following are useful points in the body, BUT may not be needled until appropriate training is undertaken.

- GB21 (trapezius)
  BL11
  LU1 and any other point on the thorax over the lung fields due to the relative risk of pneumothorax. Needling in this region should be shallow and/or away from lung tissue and/or over bone or cartilage.
  Note lung and pleura anatomy.

  LUNG FIELDS: Superiorly: extends 2-3cm above clavicular line (hence GB21 being most frequent point documented with pneumothorax – thus sufficient minimum training is required to needle this point). Antero-laterally: the lung extends from rib 6 mid clavicular line to rib 8 mid axillary line.

  PLEURA: extends 2 ribs below the lung fields. Antero- laterally: 8th rib mid clavicular line down to rib 10-12 laterally (mid-axillary line). Posteriorly: lung extends to rib 10, and pleura down to rib 12 (at lateral border of erector spinae).

- Orbit of the eye points including BL 1, ST 1 and Ex Pt 4 (qiuhou).
- Certain neck points including CV 22 (anterior neck), LI 18 (lateral neck in the major vessels), SI 17 (lateral neck over the baroreceptors), GV 15 (over the spinal cord), and GV 16 (over the brain stem).
- ST 21 which lies over the gall bladder on the right should be needled superficially and/or obliquely.
- CV 17 (over the sternum) should be needled superficially and/or obliquely because of potential sternal foramena. The heart is only 15-25mm below skin in slim patients with a sternum foramenale.
- SI 11 (over the infrascapular fossa) should be needled superficially and/or obliquely because of potential scapular foramena.
- Ah Shi (tender points) points close to vulnerable structures.
- Care should also be taken when needling over enlarged diseased organs, a full bladder, or in the abdomen and back of a pregnant female.
- Care should be taken needling over the spinal cord or avoid deep needling and the introduction of infection to the spinal canal.
- Care should be taken needling adjacent to vessels, nerves, or needling into joints and bursae.

Lin, Chou & Chu, (2013) have published a review article on proposed safe depths of Acupuncture. This article is freely available online.

CARE IN CERTAIN CONDITIONS

PREGNANCY

Traditionally the novice Acupuncturist has been warned of the dangers of Acupuncturing a woman during her pregnancy. Acupuncture has much to offer the pregnant patient, but should only be provided with caution and after the clinician has received relevant training. Research has demonstrated that there is little evidence that Acupuncture can induce labour (Smith, 2002). Cummings and Reid, (2004, p.136) state:

"There is no indication from the scientific literature to suggest that Acupuncture needling by means of its physiological effects, can adversely influence the outcome of pregnancy. The concept of "forbidden points"

in pregnancy is not supported by reliable data, and traditional texts are often contradictory in this area. By virtue of its ubiquitous use, needling of PC6 is considered safe at all stages of pregnancy".

Cummings (2011) also failed to find any plausible physiological mechanism for risks attributed to Acupuncture during pregnancy (such as altering blood flow to the uterus, altering maternal progesterone or by stimulating uterine contractions). However as one in four to five pregnancies naturally abort especially in the first trimester, and as Acupuncture is still used with the intention of inducing labour, the risk of Acupuncture should be fully outlined and it is advisable to seek written consent prior to Acupuncture treatment (see Appendix). It is recommended that the patient also discuss Acupuncture treatment with the patient's doctor or midwife.

Acupuncture should be used with extreme caution during the first trimester of pregnancy, particularly any Acupuncture treatment that would alter uterine blood circulation. Strong electro-acupuncture and over stimulation of points should be avoided during pregnancy. In the second and third trimesters points in the abdomen and lower back should be avoided.

Historically it has been stated in later trimesters Acupuncture points that should be used with caution include LI 4, GB 21, SP 6, BL 60, KI 3, BL 67 and LR 3, points over the abdomen, ear points for the endocrine and genito-urinary system and scalp points for the genital and foot motor sensory areas. However these points have been utilised in research studies in pregnant woman with pelvic girdle pain without the occurrence of adverse events such as miscarriage.

Conversely reviewers have also cautioned that the patient numbers in studies may be insufficient to detect detrimental effects. Betts & Budd (2011) reported that contractions were experienced by several women in mid trimester, after stimulation of LI 4 for dental pain. IAAPT recommend the prudent use of Acupuncture in pregnant patients with written informed consent and discussion of the above.

DIABETES

Due to poor peripheral circulation, the effect of some points on blood sugar levels, slower healing speeds and increased risk of infection, care must be taken when needling diabetic patients and the relative risk of needling should be considered.

PACEMAKERS

Patients with pacemakers should not receive electro-acupuncture.

CONFUSED PATIENTS

The patient must be able to consent to the proposed treatment. The use of a patient advocate is recommended if a patient cannot make a full informed consent to treatment. The patient must be able to remain still for the duration of the treatment, and must be continuously supervised.

CHILDREN

Physical Therapists should also consider gaining consent from both the parent and the child, especially if the child is under 16 years of age. Members should be cognisant of the national laws pertaining to the treatment of underage clients

BLEEDING DISORDERS

Naturally occurring haemorrhagic diseases are a relative contraindication to treatment (e.g. Haemophilia, Von Willebrands disease). If needling techniques are implemented then lighter stimulation and smaller gauge needles would be indicated.

Do not practice Trigger Point Dry Needling on these patients.

Do not needle into joint spaces in these patients.

ANTICOAGULANTS

Patients on high levels of blood thinning medications such as Plavix, Clexane, or Warfarin may not be suitable for Acupuncture. The international normalisation ratio (INR) is a measure of coagulation. Normal INR without anticoagulation therapy is 0.8-1.2. The target range for INR in anticoagulant use (e.g. warfarin) is 2 to 3. In some cases, if more intense anticoagulation is thought to be required, the target range may be as high as 3-4 depending on the indication for anticoagulation. Check with your patient regarding their INR status. Care should be taken when needling patients on anticoagulants (consider finer gauge needles) and it is advisable to apply pressure with a cotton ball to the site of insertion after withdrawing the needle. Additional consent should be sought prior to treatment explaining the potential risk of a bleed or bruise.

Never needle into joints to minimise the risk of haemarthrosis in these patients.

Do not do vigorous Trigger Point Dry Needling on patients with a high INR.

CANCER

Acupuncture treatment for patients with cancer may be very beneficial for treating pain and nausea. It is contraindicated to needle over the tumour area because of altered anatomy. Due to probable compromised immunity extra care should be taken when needling patients with cancer. Filshie (2001), and Filshie and Hester (2006) provide guidelines for Acupuncture treatment of patients with cancer. Needling may be used to help alleviate pain or other symptoms that may occur due to the cancer or associated treatment. Practitioners should be familiar with the patient's current blood platelet and white cell counts and discuss with the patients oncologist, if necessary, prior to needling. Needling should be avoided in areas affected by lymphoedema. The practitioner should be appropriately trained and experienced in the management of this client group.

BLOOD BORNE DISEASES

Patients may be questioned as to their awareness of having a blood borne disease (such as HIV or Hepatitis). Care should be taken when needling **any** patient in reference to the possibility of having a blood borne disease. Gloves are not usually worn when needling a patient however some institutions may have guidelines that require the Physical Therapist to don a pair of gloves particularly when removing the needles when the risk of a bleed is great. Remember that the clinician is at risk of contracting the disease (particularly with hepatitis), should any form of contact with the needle, blood, or bodily fluid occur. Microscopic evaluation of Acupuncture needle shafts after use show the presence of cellular material and fluids from the patient. Care and correct technique, using the universal guidelines (i.e. presume that every patient has Hepatitis B or HIV and only utilise single use, disposable needles) equally, regardless of the likelihood of the patient having a blood borne disease.

N.B. IAAPT strongly advises any practitioners who intend to practice Acupuncture or Dry Needling techniques and who have a potentially infectious blood borne disease to be aware of the legislation which apply in the country in which they are practicing.

EXTERNAL INFECTIOUS PATHOGENS

Methicillin-sensitive staphylococcus aureus (MRSA) and methicillin-resistant staphylococcus aureus.

Please note that the patient or the clinician may be MRSA positive. Numerous documented consequences of MRSA infection post Acupuncture include septic arthritis, abscess formation, joint destruction, paraplegia, necrotising fasciitis, and multi-organ failure.

One practitioner with MRSA in their nasal cavity infected several patients with MRSA; five patients developed septic arthritis and bursitis, three had pyomyositis, three had bacteraemia. All recovered following antibiotic therapy 12-127 days (72 median) (Murray et al, 2008).

Furthermore there is published a report of a 15 year old patient who received Acupuncture to his shoulder with sterile disposable needles and had their skin alcohol swabbed prior to treatment. He developed

osteomyelitis, cellulitis and myositis from methicillin-sensitive staphylococcus aureus, requiring IV and oral antibiotic treatment (Landman & Ma, 2012).

Staphylococcus aureus is a common skin flora, thus it is reasonable to infer the potential for direct inoculation from an Acupuncture needle. Landman & Ma, (2012) consider it to be "prudent to inform patients of the potential for serious infection and encourage inquiry into the Acupuncturist's use of sterile technique and employment of skin preparation procedures".

IAAPT recommend the use of betadine sterilisation in immune compromised patients or if needling into a joint space. Woo et al (2002), state that Acupuncture needle induced mycobacteriosis is not necessarily prevented by the use of sterile swabbing of skin as many bacteria are alcohol resistant. Hence Povidone-Iodine swabbing of the skin, followed by allowing the skin to dry for two minutes should occur prior to needling into a joint space or in an immune compromised patient.

For full information regarding skin preparation see section Hygiene requirements /Skin Sterilsation.

ACUPUNCTURE MYCOBACTERIOSIS

These mycobacteria, such as staphylococcus aureus are thought to be transmitted from the environment to patients via contaminated equipment used in Acupuncture, such as cotton wool balls/swabs, towels, hot pack covers and from boiling tanks. All mycobacterial infections associated with Acupuncture so far have been characterised by localised meridian specific and Acupuncture point specific lesions without dissemination.

ACUTE IMMUNE DISORDERS

Patients with acute immunological disorders (e.g. acute states of rheumatoid arthritis or systemic lupus erythema) have an increased risk of infection and therefore should be considered a relative risk in regard to Acupuncture treatment. Care should be taken when needling such patients and universal precautions used

Associated Risk: Lichen Planus/Koebners phenomenon

Skin rashes may develop as a result of Acupuncture therapies.

Koebners phenomenon relates to skin lesions appearing on lines of trauma, where the dermis has been damaged. Subsequently the lesions spread. They are more likely to occur in patients with autoimmune diseases, such as Psoriasis or Systemic Lupus Erythematosis. Lesions may develop in three days, but usually develop between 10-20 days. As many as 50% of people with psoriasis experience the Koebner phenomenon, and some people develop a new psoriatic lesion each time the skin is injured.

Lichen Planus has occurred following Acupuncture either as an immune response to the skin trauma itself or potentially via a subclinical viral infection from needling. The cause of lichen planus is unknown, and the eruptive and florid disease suggests that a cutaneous insult such as Acupuncture can be enough to act as a trigger. It has been hypothesised that evoked koebnerization may produce a reactive immunologic cascade leading to widespread lichen planus

INCOMPETENT HEART VALVE OR VALVE REPLACEMENTS

Patients with an incompetent heart valve or valve replacement have an increased risk of infection and therefore relative precautions must be considered and they should be needled with care. It may be pertinent to seek advice (in terms of consent or antibiotic prescription) from the patient's general practitioner or cardiac specialist. The routine use of betadine to prevent the possibility of endocarditis must be followed for any Acupuncture needling technique. Indwelling body needles or ear needles should not be used and indwelling ear beads only used with extreme caution and warning to the patient.

ALLERGY TO METALS

Patients allergic to metals may react to Acupuncture needles and relative risks should be discussed prior to treatment. Patients with metal allergies may be left with grey skin discolouration at the needle site. The risk of skin discolouration is greater when leaving indwelling needles in situ.

EPILEPSY

A Cochrane Review of Acupuncture in epilepsy reported that Acupuncture was not without its risks in terms of infection and needle injury. Acupuncture increasing or causing seizures was not cited as a risk factor. However patients with epilepsy should be needled with care. The number of needles, strong points, stimulation of the needles and length of time that the patient is needled should all be considered. Furthermore it is advised that patients with epilepsy are not left unattended during treatment. A patient with apparently well controlled epilepsy with a painful musculoskeletal condition was treated successfully with two sessions of Acupuncture. However, four hours after the first treatment and during the second, an adverse event involving impairment of consciousness occurred. The patient subsequently experienced an increased frequency of complex partial seizures resulting in the loss of his driver's licence.

LYMPHOEDEMA

Lymphoedema patients are advised to avoid accidental and non-accidental skin puncture in the affected or at risk area to reduce the possibility of introducing infection or exacerbating swelling.

Acupuncture has been considered by many to be completely contraindicated in the treatment of secondary lymphoedema due to the risk of cellulitis. Research into Acupuncture treatments in lymphoedema is very recent, and the majority of studies are either pilot or studies with small population sizes limiting the power of results. Further research is required to compare their safety and efficacy. However studies have demonstrated Acupuncture as a safe and effective treatment for secondary lymphoedema. Points in the opposite non affected limb should be considered for treatment.

FRAIL PATIENTS

Patients with a weak constitution after prolonged chronic illness may tolerate Acupuncture poorly. Minimal treatment (reduced number of needles, reduced treatment times, finer gauge needles and minimal stimulation of the needles) should be considered. They may be more susceptible to the sedating effects of Acupuncture.

MEDICATIONS

Due to the effect on the autonomic system, patients may have reactions that affect their current medications. Consequently as a result of the homeostatic action of needling, an over correction of a patient's medical condition may occur. This is particularly pertinent for patients on blood pressure or diabetic medications. Research states that this is usually a temporary overcorrection and patients should not alter their prescribed medications. It is advisable for the Physical Therapist to consider this possibility and it may be prudent to discuss this with the patient and the prescribing physician.

STEROIDS

Long term steroids may thin the skin and suppress the immune system.

NEUROPRAXIA

Neuropraxia following Acupuncture has been reported in the literature. Other studies have tested needling the median nerve at PC6 under ultrasound guidance and note no long term injuries. It has been hypothesized that transient (one week approximately) neuropraxia's may occur through tissue bruising adjacent to a cutaneous nerve. Should neuropraxia occur the seeking of medical advice is advised.

SHINGLES

Acupuncture of a dermatome previously affected by shingles may reactivate the virus. However, Acupuncture treatment may be of value in the treatment of post-herpetic pain. All information available should be discussed with the patient.

SPINAL INSTABILITY

Treatment using local Acupuncture points should be avoided if spinal instability is present, such as in patients with vertebral metastases or potential fractures.

TREATMENT EXTERNAL TO CLINICAL ROOMS

Care should be taken when needling patients at an external setting (such as on a home visit or at a sporting venue) to ensure that patients are adequately positioned to prevent injury should fainting occur. Patient's skin should also be examined to ensure that it is clean prior to treatment (see Hygiene Requirements section of this document).

GUIDELINES FOR SAFE PRACTICE OF ELECTROACUPUNCTURE

ELECTROACUPUNCTURE (EA)

Use a biphasic stimulator, designed for EA. Direct current (DC) must be avoided in order to prevent polarisation of the needles due to electrolysis. The unit must be battery (not mains electricity) operated, regular therapeutic EA current is approximately 0.5- 20mA, mains -current is substantially higher- 13AMPS/13,000mA. Do not use needles with a plastic/hilt/handle, or needles made from different metals.

Contraindications and Precautions

EA should not be applied:

- Over the head of anyone aged 12 or less (or across head or neck at all in the USA).
- The anterior triangle of the neck, carotid sinus or vagus nerve, EA has been shown to produce bradycardia/over the carotid sinus, causing a possible hypotensive response.
- Near the recurrent laryngeal nerve, has been shown to cause laryngeal spasm and near the larynx, especially using HF as can cause airway restriction.
- With patients with pacemakers, leads to the heart in situ, implanted defibrillators or artificial hearts.

Patients with heart pacemakers or artificial hearts should not receive EA, unless under medical supervision and ECG monitoring. All contraindications and precautions of manual Acupuncture should be observed. Extra care must be taken if patients have bleeding disorders or are on anticoagulant therapy, as potential muscle contraction and the movement of the needle may create a significant bleed. Furthermore muscle contraction may encourage needle movement, for needles to fall out, or be drawn deeper into tissue. Thus special care must be taken when providing EA (particularly low frequency EA) near vulnerable anatomy, such as lung fields.

Extra care must be taken if patients have bleeding disorders or take drugs like Warfarin. The muscle contraction and the movement of the needle can create a significant bleed.

Using re-sterilised needles and EA is a greater risk for allergic reactions (dermatitis).

GUIDELINES FOR THE SAFE USE OF MOXIBUSTION

Moxibustion is the burning of various forms of dried Artemesia Vulgaris punk to produce radiant heat for a local effect in the tissues.

Precautions and Contraindications

- Danger of burning, heat sensitivity must be checked before treatment.
- Use with great caution in hirsute (hair covered) areas of the body.
- Not recommended for use on Lung meridian points.
- Not used in TCM Heat conditions.

- Not used on broken or damaged skin.
- Moxa stick or rolls attached to needles are advocated for patient safety, rather than moxa cones which are placed directly on the skin, or over another medium, such as salt or ginger placed directly on the skin
- If using rolls attached to needles ensure that ash does not fall onto the patient and that the therapist can safely remove the burned moxa roll and hot needle.
- Use with care with children or frail patients although it can be helpful with the latter.
- Smell! Some people dislike the smell immensely and will be uncomfortable if it is used, perhaps the smokeless variety could be substituted in these circumstances.

GUIDELINES FOR THE SAFE APPLICATION OF CUPPING AND SPOONING/GUA SHA

This technique is recommended for those trained in the practice only

Definition

Application of vacuum cups to fleshy areas of the body to produce a change in superficial circulation.

Equipment

Cups should be purchased from a reputable supplier. The use of cupping equipment not initially designed for patient use is discouraged. Check that all cups used have a smooth, non-chipped rim.

Problems and Precautions

1. Danger of burning, take care that there is no moisture present when using traditional glass cups.
2. Cannot be used in hirsute areas (hair covered) of the body.
3. Mild bruising may occur due to cupping. The risk should be explained when getting consent. It is advisable to draw the patients' attention to any bruising which has occurred. Use a mirror if necessary, so that they are not surprised when they get home.
4. It is essential to check the state of the skin before starting. Do not use on broken or damaged skin.
5. Use with care with children or frail patients although it can be helpful with the latter.
6. Avoid the sacral area or abdomen of pregnant women
7. Avoid using cupping or spooning on patients who have bleeding disorders or are on anticoagulant therapy
8. Cups and spoons must be cleaned after each use. Thermal disinfection, is the simplest, most efficient and cost-effective method of disinfection. It can be achieved in an automated thermal washer-disinfector by choosing the appropriate cycle.

Chemical disinfection can be achieved with a compatible TGA-registered instrument-grade disinfectant, used alone or together with an automated washer-disinfector. Chemical disinfectants include alcohols, chlorine and chlorine compounds, formaldehyde, hydrogen peroxide, phenolics and quaternary ammonium compounds

N.B. If contact with blood occurs, the cup or spoon should be considered contaminated and disposed of unless it can be completely sterilised.

GUIDELINES FOR AURICULAR NEEDLES, PRESS NEEDLES AND BEADS

- All contraindications and precautions of manual Acupuncture should be observed
- Clean the ear with an alcohol swab, or soap and water to remove dead cells/wax. Allow to dry for two minutes

- In case of press needles/beads, sterilise the skin with 1% solution of iodine in 70% alcohol. Allow to dry for two minutes. After applying a sterile disposable press needle/bead, to seal or further disinfect the area, apply 1% iodine in flexible collodion solution, or 1% iodine. It may also be covered with “Op-Site”.
- These needles/beads may remain in place for seven days. In humid conditions needles/beads should be left in-situ for much shorter periods
- At the time of removing the press needles check the tissue and assess whether an antiseptic ointment or antibiotic ointment is required to be applied to the needle site
- Extra precautions must be taken with all ear Acupuncture because the cartilage has a very poor blood supply. If the ear becomes infected, it is difficult for the body to mount an immune response to the invading bacteria. Do not use press (semi-permanent) needles if there are obvious lesions on the ear or the patient has an immune deficiency disease or has compromised heart valves. Should the press needle or bead “fall out” into the ear canal it is advisable to leave it in situ and it will be removed by normal wax production.

Infection at the site of indwelling needles has been implicated in the aetiology of bacterial endocarditis in patients with valvular heart disease and septicaemia in debilitated patients.

If an indwelling needle (relating to the treatment of ear or body points using indwelling needles) falls out unnoticed, there is a risk of needle stick injury and thus the potential for the spread of blood-borne infection.

MANAGEMENT OF ADVERSE REACTIONS IN ACUPUNCTURE AND DRY NEEDLING

PAINFUL TREATMENT

If pain persists while the needle is inserted it should be removed. Stinging sensations may indicate the stimulation of a cutaneous nerve or small vein. If pain persists following a treatment, the patient can be advised to apply heat or ice.

HAEMATOMA

Care should be taken to avoid injuring blood vessels, however if bleeding does occur, apply pressure to the area with a cotton ball after the needle has been withdrawn. Ice can be used locally to minimise the bruising. Always inform the patient if a bruise occurs. If there is a risk of contact with blood then glove(s) should be worn.

FAINTING

This may be caused by nervous tension, hunger, fatigue, incorrect positioning, and excessive stimulation of the needles or if the patient is autonomically labile. To avoid fainting ensure the patient has eaten recently, prior to treatment explain the Acupuncture procedure, the patient should be treated in a supine position, and insert as few needles as possible using minimal stimulation on the first treatment. If fainting occurs stop needling, remove all needles, ensure the patient is safely lying down and consider raising their legs. Consider acupressure of GV 26 or KI 1. On arousal offer water, warm tea or something sweet to eat/drink and reassure the patient. Symptoms should abate after resting. Be aware that 51% of all faints occur in the first three treatments. Also be aware that fainting can occur even when the patient is treated in lying, so take particular care if your patient is in prone lying and you cannot see their face.

STUCK NEEDLE

A stuck needle may occur due to spasm of the local muscle after insertion of the needle, twisting the needle with too much amplitude or in only one direction causing the muscle fibres to bind, or if the patient alters their position whilst the needles are in-situ. To avoid stuck needle(s), position the patient in a relaxed manner, avoid excessive twisting of the needle and avoid needling tendinous tissue. When removing a needle, it is less likely to become stuck, and is more comfortable for the patient if gentle pressure is applied

to either side of the skin 5-10 mm adjacent to the needle. If the needle is stuck due to over rotation/needle grasp then rotate the needle in the opposite direction and remove. If it is stuck due to local muscle tension, leave the needle in for a short period of time, relax the tissue around the needle with massage, ice massage or by inserting 1-2 needles around the stuck needle, then remove the needle.

BENT NEEDLE

A bent needle may occur if the needle strikes hard tissue, there is a sudden change in the patient's posture, or strong contraction of the muscle occurs during Trigger Point needling. To prevent a bent needle occurring, insert the needle carefully with the patient in a comfortable position. If a bent needle occurs instruct the patient not to move, relax the local muscle, apply gentle pressure to the overlying skin 5-10mm adjacent to the needle and remove the needle slowly following the course of the bend.

BROKEN NEEDLE

This may occur due to poor needle metal quality, strong muscle spasm, sudden movements by the patient when the needle is in place or by forcefully withdrawing a bent needle. The likelihood of a broken needle is very rare with the use of single use sterile needles, as there is no metal fatigue from repeated use and autoclaving. However, if a needle is repeatedly used with Dry Needling a needle breaking is a possibility. The patient should be advised to remain calm to avoid the needle from going deeper. If the broken needle is exposed remove the broken section with tweezers, if it is not exposed press the tissue around the insertion site until the broken section is exposed and remove with tweezers. If the needle cannot be removed in the clinic, medical attention must be sought so that the needle can be removed surgically. Immobilise the part to prevent further needle movement into tissues and tape a paper clip over the area so that it may be located on x-ray or ultrasound on referral to A&E.

INFECTION

The skin in the region to be needled should be inspected and if infection is suspected needling should be deferred and medical advice sought. Care should be taken when needling very thin or fragile skin due to the relative risk of infection.

Please note that indwelling needles left in situ are associated with a greater risk of skin infection than Acupuncture needling used during a treatment session.

EXCESSIVE DROWSINESS

A small percentage of patients may feel excessively relaxed and sleepy after Acupuncture treatment. They should be advised not to drive until they have recovered. It is advisable not to leave the needles in for a significant amount of time or to over stimulate the needles if this has happened to a patient previously. This is most likely to occur following their first or second appointment.

PNEUMOTHORAX

When needling around the thoracic region patients should be warned of the rare possibility of a pneumothorax. Care should be taken when needling GB 21 (upper trapezius) and any other points over the thoracic region, which could inadvertently create a pneumothorax. Where possible angle the needle away from the underlying lungs and/or needle over bone or cartilaginous tissue as a potential "backstop". Practitioners must have attended adequate training programs to needle in the thoracic region. The symptoms and signs of a pneumothorax may include shortness of breath on exertion, chest pain, dry cough, and decreased breath sounds on auscultation. These symptoms may not occur until several hours (up to 48 hours) after the treatment and patients need to be cautioned of this especially if they are going to be exposed to marked alterations in altitude such as flying or scuba diving. If a pneumothorax is suspected it is the responsibility of the **practitioner** to ensure that the patient is sent urgently for an x-ray and medical management.

NEEDLE STICK INJURY

N.B. Only therapists trained in Acupuncture or Dry Needling techniques are permitted to remove needles from a patient.

Needle stick injury occurs when the needle inadvertently pricks, punctures, slashes or scratches the therapist after it has been withdrawn from the patient.

If this does occur wash the wound well, squeeze the area to encourage bleeding from the needle stick wound and have blood tests for Hepatitis B and C and HIV/AIDS. The patient may also be requested to have the same blood analysis performed. This should be done at the therapist's expense. If the patient is HIV positive the Physical Therapist should urgently seek medical advice concerning anti-viral medications, according to the protocols /recommendations of their own state/country. IAAPT recommends that all members should ensure that they are vaccinated for Hepatitis B and have anti-bodies checked after a full course of vaccination to ensure immunity.

The WHO (2000) estimate that the risk of infection after exposure to a needle stick injury with fluids from an infected person are 0.3% for HIV, 3% for Hepatitis C and 6-30% for Hepatitis B. However the greatest risk is from hollow-bore needles (which can hold and transfer blood and other fluids).

If re-using the Acupuncture needle during the same treatment, i.e. withdrawing a needle and immediately re-inserting the needle into the patient, then when rethreading the needle into the guide tube for re-insertion always thread the needle handle first into the guide tube to avoid "needle stick".

Always have a cotton ball at the ready when removing needles. Dispose of needles and blood spotted cotton balls carefully in a sharps container. Therapists need to avoid "needle stick" injury as they are the ones at risk. Never carry needles to a sharps container, always have the container within reach when withdrawing needles.

It is worth noting from analysing reports of Adverse Reactions (AE) the following main risks were identified by Grant et al in 2003.

- inadequate training
- limited knowledge of anatomy or of certain physiological or pathological conditions
- failure to check abnormal anatomy
- poor needling technique
- inadequate knowledge of recommended texts or recent articles
- not paying sufficient attention to the patients' condition when they present for treatment

Adverse events should be reported. Check your Registering body for any relevant forms.

HYGIENE REQUIREMENTS – PATIENT AND THERAPIST

This is the best evidence-based literature IAAPT has at its disposal, and thus provides a guideline for IAAPT members and all others practicing Acupuncture needle use.

HANDWASHING AND GLOVES

Physical Therapists must ensure that their hands and nails are clean prior to giving treatment

Hands should be washed for at least 30-60 seconds before needling a patient. Soap and water, or alcohol based hand rub (ABHR) may be used. ABHR's should contain 70% alcohol (ethanol). If using ABHRs hands should be washed after every 4-5 applications of ABHR. Further note manufacturer's guidelines. Hand moisturisers should be used at regular intervals to help maintain the Physical Therapist's skin condition.

N.B. Some countries have recommendations that ABHR's meet testing standards for bactericidal effect, and the product is approved as a medical hand hygiene product.

Cuts, abrasions or lesions on the skin of the therapist are a possible source of pathogens and should be covered by water resistant occlusive dressing or disposable latex or nitrile gloves should be worn.

In the absence of skin lesions the choice of wearing gloves lies with the Physical Therapist. However some working environments may require the therapists to glove when needling. Wearing gloves may protect against direct contact with blood and can decrease the risk of infection should a needle stick injury occur. It is however acknowledged that various forms of Acupuncture needling requires the ability of the Physical Therapist the feel the reaction of the tissue that is being needled and gloves may reduce the ability to do this. Health care workers have reported reactions to latex gloves.

The risk of contact with blood is considered minimal in safe Acupuncture procedures. As the risk of blood contact usually occurs when needles are being removed Physical Therapists may consider the wearing of gloves when removing needles. Alternatively when Trigger Point Dry Needling Physical Therapists may consider wearing a glove on their non-dominant/non needling hand.

If the therapist has a blood borne disease such as Hepatitis or HIV they should consider wearing gloves when providing treatment (N.B. treatment to be given with informed consent from the patient).

N.B. Hands must be washed after needling a patient or after removal of gloves.

SKIN PREPARATION

In a healthy non immune-compromised patient no skin preparation is usually required unless needling into area that is particularly susceptible to infection (refer to skin sterilisation). Local workplace infection control guidelines should be followed if they differ from above, e.g. some local workplace policies may stipulate sterile swabbing the skin prior to needling and allowing two minutes for it to dry.

If the patient's skin does not appear clean (e.g. If they have been working outdoors or walking on the beach) you should request the patient to wash their skin prior to administering the Acupuncture treatment.

Physical Therapists must ensure that their hands and nails are clean prior to giving treatment. Hands should be washed with soap and water for at least 30-60 seconds, or 70% alcohol based hand rub before and after every treatment.

The patient's skin in the area to be needled must also be clean. If the patient does not present with clean skin, the area to be needled may be cleaned with soap and water, or by using an isopropyl alcohol skin wipe and allowing two minutes for it to dry.

N.B. The above procedures will clean/disinfect skin, which is sufficient for Acupuncture and Dry Needling procedures and is the required minimum standard.

SKIN STERILISATION

Skin sterilisation is recommended for patients who have a deficiency in their immune system, if a patient is known to be infected with MRSA, or when needling vulnerable areas in the healthy patient such as bursa, joint spaces (e.g. shoulder, knee) points adjacent to the nose and upper lip, and the scalp points (connections between intracranial and extracranial venous channels allow infection to travel freely between scalp, skull, meninges and brain).

A sterilising solution such as 1% iodine in 70% alcohol or the equivalent betadine preparation should be used and left on the skin to dry for a minimum time of two minutes (for those allergic to betadine/iodine, chlorhexadine in 70% alcohol is suitable). It is recommended in situations where patient sterilisation is required, that Povidone-Iodine Prep Pads are utilised. These provide commercially available disposable single use iodine swabs or 10% Providone–Iodine solution, equivalent to 1% iodine. Check local availability of similar product.

There is limited literature available in this field, however it has been demonstrated that single use alcohol swabs do not protect against such infections as MRSA.

Immune-compromised patients include those with malignancies, autoimmune problems such as Systemic Lupus Erythematosus (S.L.E), AIDS, or R.A, after heart valve replacement, after cancer treatments and those on immune suppressive drugs e.g. organ transplant recipients. These groups of people can get an infection from a much smaller number of infectious agents than those with an intact immune system. Disinfection may not remove enough organisms to prevent infection, hence their skin needs to be sterilised.

Literature has documented an increasing number of patients who have had Acupuncture related MRSA infections introduced into joints, spinal cord, and the formation of abscesses in previously healthy tissue.

The background to this policy is that in a normal healthy person a certain amount of infectious agents (bacteria, viruses) have to be introduced to the host's system before the body's defences are overwhelmed and an infection takes place. To reduce the number of bacteria or viruses below this infective agent is to **disinfect**. To remove all forms of life from the skin is to **sterilise**.

WASTE DISPOSAL ADVICE FOR NEEDLES OR BODILY FLUIDS

The treatment area should be clean, private if possible and have washing facilities near at hand.

Wet surfaces should be disinfected regularly.

All discarded needles must be disposed of in a sharps box clearly marked "Medical Sharps Waste". Sharps containers may have to comply with individual country legislation. Sharps containers must be kept out of reach of children.

Sharps containers must not be filled beyond the level prescribed on the container.

These should either be incinerated via a needle collection service or a biological waste disposal contractor, or disposed of according to the Local Health Authority's protocol/policies.

The use of disposable needles is essential.

Most of the major infections reported in the Acupuncture literature, including HIV, and Hepatitis B, have resulted from errors in sterilisation or re-useable needles. However the recent incidence of Acupuncture related MRSA infections also relates to the use of disposable needles and skin disinfection using a sterile swab before treatment.

Care must be taken to avoid contact with the patient's blood, should bleeding occur. A dry cotton wool ball should be used to absorb blood and it should be disposed of into an appropriate container marked "Contaminated Material" (or sharps container) and disposed of by incineration or according to Local Health Authority practice. In situations where this is not possible, place all blood contaminated products in a sealable/sealed plastic bag and then dispose in their usual manner. The premise is that the people who deal with the rubbish should not come in contact with any blood-contaminated items. Wear gloves when cleaning all spills of blood or body fluids and handling contaminated linen.

Linen contaminated with blood or other bodily fluids should be soaked overnight with hypochlorite solution (bleach) before laundering. A household bleach such as Napisan is acceptable. Hospital grade disinfectants are not necessary for the small point bleeds which may occur after Acupuncture. Ensure linen is hot washed after soaking and thoroughly dried.

MANAGEMENT OF BLOOD AND BODILY FLUIDS SPILLS

Large blood and bodily spills are unlikely in Acupuncture practice however if a spill occurs then it is recommended to....

- Wear personal protective equipment. Heavy duty utility gloves are advised
- Absorb the spill with dry, disposable paper towels. Since most disinfectants are less active, or even ineffective, in the presence of high concentrations of protein, as are found in blood or serum, the bulk of the spilled liquid should be absorbed prior to disinfection
- Confine waste in a disposable waterproof bag
- Clean the spill site with detergent and water, rinse and dry
- If skin will contact the spill site or if the site is difficult to access, disinfect the surface using a chlorine generating disinfectant left on for two minutes
- Disinfectants should be left in contact with the surface for 10 minutes
- If complete removal of blood is not possible expose the surface to diluted bleach for 20-30 minutes
- Surfaces that cannot be cleaned adequately (e.g. in carpet) may need replacement
- Sodium hypochlorite solutions must be freshly prepared
- Sodium hypochlorite may be irritating to skin therefore protective gloves must be worn
- Sodium hypochlorite may corrode metal and damage other surfaces
- Liquid household bleach usually contains 4-5% available chlorine, diluted with tap water 1:100 gives 5000 ppm approximately which will inactivate Hepatitis B in 10 minutes and HIV virus in two minutes
- Flood the spill site or wipe down the spill site with disposable towels soaked in disinfectant to make the site “glistening wet”
- Absorb the disinfectant solution with disposable materials. Alternatively, the disinfectant may be permitted to dry
- Rinse the spill site with water to remove any noxious chemicals or odours. Dry the spill site to prevent slipping or further spills
- Materials used to absorb spillage should be placed in impermeable waste bags and disposed of

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APPENDIX 1
GLOSSARY
LIST OF EQUIVALENT ALPHABETICAL CODES OF MERIDIAN NAMES

Meridian	Standard Code[1]	Numerical	Codes Used[2]
1. Lung Meridian	LU	I	Lu L
2. Large Intestine Meridian	LI	II	CO Co Li
3. Stomach Meridian	ST	III	St S
4. Spleen Meridian	SP	IV	Sp
5. Heart Meridian	HT	V	HT Ht
6. Small Intestine Meridian	SI	VI	Si
7. Bladder Meridian	BL	VII	Bl UB B
8. Kidney Meridian	KI	VIII	Ki K
9. Pericardium Meridian	PC	IX	CS HC Hc PC Pe P
10. Triple Burner/Energiser Meridian	TE	X	TB TH TW SJ 3E 3H
11. Gallbladder Meridian	GB	XI	GB
12. Liver Meridian	LR	XII	G LIV LV Lv Liv
13. Governor Vessel Meridian	GV	XIII	DM DU Du Go Gv
14. Conception Vessel Meridian	CV	XIV	Cv REN Ren RM

[1] This is part of the alphameric code element of the standard Acupuncture nomenclature proposed by the WHO Regional Working Group on the Standardisation of Acupuncture Nomenclature 1991, 1993.

[2] Some of the alphabetic codes shown here have already been discarded but may still have been used in older documents. They have therefore been included in this list.

APPENDIX 2
ASAP METHODS OF REDUCING THE SPREAD OF INFECTION

This section of the guidelines is based on the *Australian Guidelines* which were written from a care delivery perspective and are underpinned by a risk management framework. Understanding the modes of transmission of infectious organisms and knowing how and when to apply the basic principles of infection prevention and control, such as standard and transmission based precautions, is critical to the success of an infection control.

There are two levels of precautions and for most private practice or outpatient settings the standard precautions are what are universally applied. Where there is the presence of know infections agents, then transmission based precautions need to be applied as required.

DEFINITION OF STANDARD PRECAUTIONS

Standard precautions refer to those work practices that are applied to everyone, regardless of their perceived or confirmed infectious status and ensure a basic level of infection prevention and control. Implementing standard precautions as a first-line approach to infection prevention and control in the healthcare environment minimises the risk of transmission of infectious agents from person to person, even in high-risk situations.

Standard precautions include:

- Hand hygiene, before and after every episode of patient contact as outlined in the 5 Moments for Hand Hygiene (see below)
- The use of personal protective equipment (PPE), in the Acupuncture context may involve the use of gloves;
- The safe use and disposal of sharps;
- Routine environmental cleaning;
- Reprocessing of reusable medical equipment and instruments;
- Respiratory hygiene and cough etiquette;
- Aseptic non-touch technique;
- Waste management; and
- Appropriate handling of linen.

DEFINITION OF TRANSMISSION BASED PRECAUTIONS

The first line of prevention of infection is the use of standard precautions.

Transmission-based precautions are additional work practices for specific situations where standard precautions are not sufficient to interrupt transmission. These precautions are tailored to the particular infectious agent and its mode of transmission.

Transmission based precautions may include on or any combination of the following:

- Continued implementation of standard precautions;
- Appropriate use of PPE (including gloves, apron or gowns, surgical masks or P2 respirators, and protective eyewear);
- Patient-dedicated equipment;

- Allocation of single rooms or charting of patients;
- Appropriate air handling requirements;
- Enhanced cleaning and disinfecting of the patient environment; and
- Restricted transfer of patients within and between facilities

HAND HYGIENE

This section of the guidelines has been based on Hand Hygiene Australia's document.

Therapists must ensure that hands and nails are clean prior to giving treatment.

- Alternatively an appropriate Anti Bacterial Hand Rub (ABHR) can be used.
- When selecting an ABHR product, HHA recommends a product that meets the EN1500 testing standard for bactericidal effect, the Product has Therapeutic Goods Administration (TGA) approval as a hand hygiene product.
- When using ABHR the manufacturer's guidelines should be followed.
- Hand moisturisers should be at regular intervals to help maintain the therapist's skin condition.
- Cuts, abrasions or lesions on the skin of the therapist are a possible source of pathogens and should be covered by water resistant occlusive dressing or disposable gloves should be worn.
- According to the *Australian Guidelines* the use of gloves is not mandatory. However when there is an anticipated risk of contacting blood or other body fluids the gloves must be worn. Normally there is minimal risk of this in Acupuncture. The risk is slightly higher when needles are removed. Therapists may consider wearing a glove on the hand holding the cotton ball, when removing needles.
- Some Australian states or territories laws concerning skin penetration may require the therapists to glove when needling.
- Hands should also be cleaned after needling a patient even if gloves are worn.
- The skin in area to be needled must also be clean. If the patients does not present with clean skin, the area should be cleaned with soap and water, or by using an isopropropyl alcohol skin wipe.
- Long finger nails present a risk, so nails must be kept short.

SKIN PREPARATION

No skin preparation is usually required unless needling into an area that is particularly susceptible to infection, such as a joint or bursa.

If your risk assessment dictates swabbing use an alcohol wipe and allow to dry for at least 1-2 minutes or use Betadine (iodine) to pre-swab the area. A sterilising solution such as 1% iodine in 70% alcohol should be used and left on the skin to dry for a minimum of two minutes. For those allergic to iodine, chlorhexadine in alcohol is suitable.

If the patient's skin does not appear clean (e.g. if they have been working outdoors or walking on the beach) you may request the patient to wash their skin prior to administering the Acupuncture treatment.

Skin sterilisation is recommended in the following:

- Immuno-compromised patients include those with malignancies, autoimmune problems such as S.L.E, AIDS or R.A. and those on immune suppressive drugs e.g. organ transplant recipients. These groups of people can get an infection from a much smaller number of infectious agents than those

with an intact immune system. Disinfection may not remove enough organisms to prevent infection, hence their skin needs to be sterilised

- When needling into a joint space (e.g. shoulder, knee) or bursa.
- For those allergic to iodine, chlorhexadine in alcohol is suitable.

The background to this policy is that in a normal healthy person a certain amount of infectious agents (bacteria, viruses) have to be introduced to the host's system before the body's defences are overwhelmed and an infection takes place. To reduce the number of bacteria or viruses below this infective agent is to **disinfect**. To completely remove all forms of life from the skin is to sterilise.

WORK AREAS

- The treatment area should be clean, private if possible and have washing facilities near at hand.
- Wet surfaces should be disinfected regularly.
- Linen contaminated with blood or other body fluids should be treated with Hypochlorite solution (Bleach) before laundering.

WASTE DISPOSAL

- Sharps containers must comply with AS4031 or AS/NZ 4261 must be located in the immediate proximity of each client receiving Acupuncture.
- Sharps containers must be kept out of reach of children.
- Sharps containers must not be filled beyond three-quarters full [NHMRC 2010 p 63-64]
- Bins must be disposed of by a waste disposal contractor according to respective State, Territory or local government regulations.

MANAGEMENT OF BLOOD AND BODILY FLUIDS SPILLS

Large blood and bodily fluid spills are unlikely in Acupuncture practice however if a spill occurs from some cause then follow these guidelines.

- Wear personal protective equipment (PPE). Heavy duty utility gloves are advised.
- Absorb the spill with dry disposable paper towels. Since most disinfectants are less active, or even ineffective, in the presence of high concentrations of protein as are found in blood or serum, the bulk of the spilled liquid should be absorbed prior to disinfection.
- Confine waste in a disposable waterproof bag.
- Clean the spill site with detergent and water, rinse and dry.
- Disinfect the spill site using a chlorine-generating disinfectant if bare skin will contact the spill site or if it a difficult to clean surface in the clinical area.
- Surfaces that cannot be cleaned (in carpet) adequately may need replacement.
- Disinfectants should be left in contact with the surface for 10 minutes.
- Sodium hypochlorite solutions must be freshly prepared.
- Sodium hypochlorite may be irritating to skin therefore protective gloves must be worn.
- Sodium hypochlorite may corrode metal and damage other surfaces.
- Liquid household bleach usually contains 4-5% available chlorine, diluted with tap water 1:100 gives 5000 ppm approximately which will inactivate Hepatitis B in 10 minutes and HIV virus in 2 minutes.
- Flood the spill site or wipe down the spill site with disposable towels soaked in disinfectant to make the site "glistening wet".

- Absorb the disinfectant solution with disposable materials. Alternatively, the disinfectant may be permitted to dry.
- Rinse the spill site with water to remove any noxious chemicals or odours. Dry the spill site to prevent slipping or further spills.
- Materials used to absorb spillage should be placed in impermeable waste bags and disposed of appropriately.