

BLOOD DONATION AFTER ACUPUNCTURE: A JUSTIFIED DEFERRAL?

What if your patients want to donate blood?

Are you aware that patients undergoing Acupuncture treatment, according to international guidelines, may not be eligible for blood donation within a certain period of time?

Recommendations published by the World Health Organization in 2012 establish that patients receiving Acupuncture treatments should not be eligible for blood donation for 1 year (1). This fact is based on potential risks of infectious diseases transmitted by acupuncture needles, eventually non-detectable by the usual Blood Bank's available equipment, considering the existence of a Window Period (*time frame between primary infection and the moment in which a screening test can reliably detect that infection*)

Deferral or Exclusion for Blood Donation.

Several circumstances, clinical conditions or previous medical procedures may be a reason of temporary deferral or definitive exclusion for blood donation. These limitations have the purpose of protecting the donor and the receiver.

For example, type I-diabetes, lymphoma and autoimmune diseases are reasons for permanent exclusion. Major surgery and other invasive procedures are a reason for temporary deferral, usually for 1 year. Following the WHO recommendations, these invasive procedures include piercing, tattooing and acupuncture (*"defer blood donation for 12 months following last acupuncture, piercing, tattoo, scarification or invasive cosmetic procedure"*).

Arguments for Blood Donation deferral after Acupuncture

In its origins and along the first centuries in the history of Acupuncture, needling has been performed without a real knowledge about infectious risks; needles made of different materials like bone, stone and metal, were probably used without any precaution. On the other hand, blood transfusion was an unknown procedure until 1665-1667 when Jean-Baptiste Denis in France and Richard Lower and Edmund King in England separately reported successful transfusions from a sheep to humans (2). Also to consider is that the first microorganisms were first mentioned during the mid-1600s and the first observation of viruses can be found in a report of 1899. Hepatitis B, Hepatitis C and HIV viruses were first described in the second half of the XX Century, and with the advance in knowledge about these infectious agents, it was verified that they could be transmitted through contact with the blood or other body fluids of an infected person; transmission may also occur through the reuse of needles and syringes in health-care settings or

during medical, surgical and dental procedures, through objects that are contaminated with infected blood (3). The same transmission mechanisms have been demonstrated for other infectious agents such as Hepatitis C, HIV and HTLV (Human T-cell Lymphotropic Virus), among others.

Given the knowledge and confirmed information mentioned above, Health Authorities have been recommending particular caution in the use of different instruments used in invasive procedures; these instruments should be properly sterilized in order to guarantee the safety concerning infectious transmission. Even today, in surgery, different instruments are still not disposable, like surgical scissors or separators.

Up until some years ago, parenteral drugs were administered using non-disposable sterilized syringes and needles. The same happened with acupuncture needles. This could be the reason, why Health Authorities like the World Health Organization still considers Acupuncture, a risky medical act, like piercing or tattoo.

Nevertheless, Acupuncture should not be analysed together or compared with piercing or tattoo. Acupuncture is a medical procedure, a medical technique, which in a growing number of countries has been legally regulated and only can be applied by qualified medical doctors, not being the case of piercing and tattoo.

During the last years, with the advent of low-cost but high quality disposable needles, industrially manufactured and easily available for acupuncture practitioners, the habit of using sterilized re-used material has been disappearing, at least in professional clinics and well trained responsible medical doctors. Nowadays, the only acceptable system to treat patients with acupuncture is through Single-Use disposable needles. This guarantees zero risk of infectious diseases transmissible through blood.

Blood Banks obviously need blood donors. Rejecting or deferring donors is of course a security measure. But in a society where every year, more people choose to be treated through Acupuncture, with the current recommendations this inevitably results in more rejection or deferral and contributes to a potential shortage of blood components. For this reason, many Blood Banks are beginning to reconsider the actual WHO recommendations and apply their own security measures in order to accept acupuncture patients treated under certain verifiable conditions.

Only to mention some examples from different continents:

- Uruguay, Argentina and México Blood Banks still recommend to wait 1 year after acupuncture treatment (4,5)
- In Brazil the recommendations can be different in different States, but in general it is stated that *“After acupuncture, the candidate has to wait 12 months for blood donation unless the needles are disposable and the procedure was done by an authorized doctor;”*(6)
- In Canada, *“Acupuncture performed with disposable or single-use needles does not affect your ability to donate; if you are not sure what kinds of needles were used, you have to wait six months after treatment before you can donate”* (7)
- Italy: *“4 MONTHS unless performed by a qualified professional with single use needles”* (8)
- Greece: *“You can donate blood after receiving acupuncture from a doctor or under supervision of a doctor, when single use sterilized needles were used”* (9)
- Australia: *“I have just had Acupuncture, can I donate? Yes, as long as the acupuncture was performed by an registered acupuncturist or a medical practitioner”* (10)
- New Zealand: *“Tattoo/body piercing (& acupuncture): Donors must wait six months after having a tattoo or body piercing before donating blood. The reason for this temporary deferral is the increased risk of hepatitis and other infections associated with tattoos and piercing. Other similar procedures that may fall under this category include acupuncture and electrolysis”* (11)

From the above examples it can be seen that many countries do not strictly follow the recommendations, which nevertheless remain in force in WHO documents from 2012. It is a fact, that even with more permissive conditions, blood banks still reject acupuncture patients as donors.

Many countries condition and restrict the possibility of donating blood after acupuncture without a major deferral, to those cases where the treatment has been performed by “medical doctors”, “authorized practitioners”, “qualified professional” and some other “qualifications”. In these cases, it may not be always clear, what has to be understood under these definitions. In different countries, different criteria could be applied. Who authorizes? Who controls? Who qualifies and/or verifies a basic or standard qualification?

COLLATERAL FACT

As mentioned above, the described facts are often unknown by practitioners and patients. It could then happen that an acupuncture patient being rejected by a Blood Bank feels his rights have been infringed by not being adequately informed by his physician. This puts us in the dilemma if to include this information in the usual Informed Consent Form.

FACTS & FINAL CONCLUSIONS AND RECOMMENDATIONS

- Blood Banks have to apply security measures in order to reduce potential risks of infections present in its donor's population and establish donor selection criteria aimed to minimize the risk of transmission of these infections from donors to recipients. This donor selection is the first crucial step in the process of ensuring blood safety as it helps to significantly reduce risk through the deferral, prior to donation, of any individuals or groups of individuals with identified risks that may be associated with infection.
- Certain previous invasive interventions can be considered risky concerning Transfusion-transmissible infections (TTI), if they are not carried out by well-trained practitioners and under certain security conditions. In the case of acupuncture, these measures include the single use of sterile disposable needles.
 - This risk is comparatively different in medical interventions, in relation to non-medical interventions.
 - Acupuncture when performed under current standards of safety, has the same risk of TTI compared to injection of pharmaceutical drugs (actually performed only with disposable syringes and needles), which are not a reason by itself for deferral.
 - Acupuncture when not performed under these safety standards, like using sterilized needles, have the same risk of TTI like minor surgical interventions, usually performed with re-used sterilized surgical instruments such for example scissors.

As a last comment we want to emphasize:

1. Medical Acupuncture procedures should never be considered in the same category of non-medical interventions like tattoo, piercing, scarifying, ritual

practices or cosmetic procedures, among others.

2. Medical Acupuncture is a procedure that should only be considered as an intervention performed by well-trained health practitioners, mainly medical doctors in accordance with every country's specific regulations.. While the existence of an unregulated practice cannot be ignored, and not only in developing countries, the WHO recommendations should not affect the professional medical acupuncture, but lead to guidelines for a safe and regulated practice of Medical Acupuncture.

REFERENCES

1. Blood Donor Selection – Guidelines on Assessing Donor Suitability for Blood Donation – World Health Organization, 2012.
http://www.who.int/bloodsafety/publications/bts_guideline_donor_suitability/en/
2. History of Blood Transfusion. American Red Cross. <http://www.redcrossblood.org/learn-about-blood/blood-transfusions/history-blood-transfusions>
3. World Health Organization - <http://www.who.int/mediacentre/factsheets/fs204/en/>
4. http://www.donandosangre.org/donando_sangre/donando_sangre_impedimentos.html
5. http://cnts.salud.gob.mx/interior/bs_donsan.html
6. http://pegasus.fmrp.usp.br/projeto/duvidas_frequentes.htm
7. <https://www.blood.ca/en/blood/abcs-eligibility>
8. <http://fidas.it/perche-donare-sangue/>
9. <http://ekea.gr/donor-eligibility/>
10. <http://www.donateblood.com.au/faq/acupuncture>
11. <http://www.nzblood.co.nz/give-blood/donating/am-i-eligible/deferrals/>

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