Auriculotherapy: A medical method in the diagnosis and treatment of diseases by using the auricle

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Received: 19 April 2022 Revised: 20 April 2022 Accepted: 24 April 2022 Abstract

Auriculotherapy is a medical method which uses the auricle in the diagnosis and treatment of diseases and is considered as a neuromodulatory technique. It is discovered by Dr. Paul Nogier and it also has led to the emergence of auricular acupuncture in the world. Although Dr. Nogier is the father of both auriculotherapy and auricular (ear) acupuncture, it is important to know that auriculotherapy does not depend on traditional chinese medicine theory but rather depends on classical medicine. Auriculotherapy treatments are planned according to physiopathology and neurophysiology of the diseases. There is no need to learn chinese medicine theory in order to be able to practice auriculotherapy. However, the legal regulations in most parts of the world do not distinguish between auriculotherapy and auricular acupuncture and therefore physicians who want to practice auriculotherapy must learn and obtain certifications for traditional chinese acupuncture which requires a long time and effort and which is a complete different medical system based on chinese philosophy. Seperating auriculotherapy educations from acupuncture education and certification programs will produce many positive effects for the physicians who would like to practice this treatment modality as an adjuvant to their own practices.

Keywords: Auriculotherapy, auricular acupuncture, ear acupuncture

INTRODUCTION

Auriculotherapy is the use of the auricle for therapeutic purposes. This method is discovered by Dr. Paul Nogier and it can be used both in the diagnosis and treatment of several diseases. In auriculotherapy, certain points are searched on the ear and when they are found, they are stimulated in various ways to create responses. Ear points are found either by the presence of pain or by detecting them with electrical devices. These points are treated by stimulating them by means of needles, infrared light, lasers, cauterization, massage or electric currents.

Discovery of Auriculotherapy

Dr. Paul Nogier started investigating about the possibility of an auricular treatment method in 1951, after he saw a patient with a scar on the ear. This patient told him that the sciatica pain, which did not improve with any medication, was relieved by a cauterization of the ear. This procedure was done by Mrs. Barrin, a healer woman from Marseille. Dr. Nogier himself also cauterized this point, known as the Barrin point, in his patients and observed that this point only relieves sciatica pain. He tried this point in several painful conditions but since he found out that the point was only effective for sciatica pain, Dr. Nogier thought that the Barrin point might be the representation of the L5-S1 lumbosacral vertebral level. He hypothesized that the antihelix of the ear was the representation of the columna vertebralis and the whole body was mapped as an inverted fetus on the ear. While investigating this hypothesis, he determined the representations of body parts and organs on the ear, and he did this at first by way of nociceptive stimulations. When there is pain in a certain area of the body, a corresponding pain occurs at the ear point. This point which correspons to a painful situation can be easily detected on the ear with the help of a pressure feeler. However ear points which correspond to internal organs and functional disorders are searched and found with the help of electrical detectors because internal organs are not always painful when there is a problem. Dr. Nogier could be able to use electrical detection in order to precise the locations of internal organs in his maps only after the discovery of Dr. Niboyet in 1963. Dr. Jacques Niboyet is a famous french acupuncturist and he discovered that the skin has low electrical resistance on chinese body acupuncture points. Dr Paul Nogier tried this discovery on the ear points and since he understood that they also show low electrical resistance, he used electrical detectors to find out further representations on the ear.

Ears in History

Although Dr. Nogier made his groundbreaking discovery in the 20th century, the history of different treatments from the auricle can actually be traced back to the ancient times. In the Egyptian civilization, some therapies were performed by making incisions on the ears. Hippocrates also knew the Egyptians' ear treatment techniques and he was treating infertility and impotence by performing ear incisions and bleedings. Even though the chinese did not know about the inversed embryo somatotopic mapping on the ear, they knew a few ear points and they made cauterizations on the top of the ear by moxa. In the famous acupuncture classic Huang di Neijing, it was mentioned that the veins around the ear regulate pain. There was also a massage book named "Essential Massage Techniques" written by Zhang Di Shan in the Qing Dynasty in 1888 and in this book there were illustrations of 5 regions corresponding to the 5 zang organs behind the ear (1). In many different civilizations in history there exists the technique of treating various pains on the body by practicing skin cauterizations (2). These cauterizations were done "loco dolenti" which means by using a body part close to the painful area. The treatment of pain with cauterizations to the ear were also done for local pains, that is for pain in the head and face region. However treating a pain in a remote body part by making a cauterization on the auricle is relatively new and as far as we know it was first made by farriers from Corsica in the 19th century and then by Mrs. Barrin. In Corsica, farriers used ear cauterizations to treat sciatica pain, but the ear point they

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used was not the point that Mrs. Barrin used. As far as we know, the point that Mrs. Barrin cauterized for the treatment of sciatica is not found in any other source in history and from that point begins the story of Paul Nogier's auriculotherapy. He has revealed a complete treatment method with intense effort and systematic study (3). After he discovered that there is a somatotopic map on the pinna of the ear Dr. Nogier prepared maps, namely cartographies showing where all body tissues and organs are represented on the auricle. Dr. Nogier's work continued for years and in 1957, he made his first publication on auriculotherapy and presented his somatotopic map in a German medical journal, Deutsche Zeitschrift für Akupunktur (4). Figure 1 shows this map in German language. After that publication, Dr. Nogier's articles were translated into chinese and chinese acupuncturists started to use this map in their acupuncture practices.

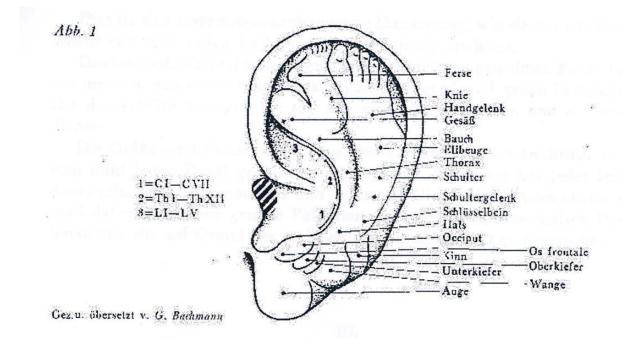


Fig. 1: Cartography of Dr. Nogier, 1957 (with the permission of Dr. Raphael Nogier)

Dr. Nogier had identified several points on his first maps but in a short time the chinese began to add and use a large number of points that they found empirically and prepared new maps, so the need to standardize the ear points was felt. In 1990, the World Health Organization held a meeting in Lyon for this purpose and the locations and names of the ear points meeting the determined criteria were standardized (5).

Mechanism of Action

Auriculotherapy is a reflexotherapy and it is considered as a neuromodulatory technique which is associated with the special innervation of the auricle (6). Its also seems to be related with descending pain inhibitory pathways (7). The very unique innervation of the auricle (especially the innervation of the concha with the auricular branch of the vagus nerve) makes it an interesting treatment location and vagus nerve stimulations from the auricle are now a very popular topic that is being used for several indications like headaches, depression and drug resistant epilepsy (6). External non invasive vagus nerve stimulations from the ear can also be considered as an auriculotherapy treatment.

Studies

Although there are several case reports and studies in the literature which show the effects of auriculotherapy in various conditions and diseases, the relative scarcity of well designed randomized studies cannot be denied. In the 2013 INSERM (Institut National de la Santé et de la Recherche Médicale) report, requested by the French government and prepared by the French National Institute of Health, studies in this field were analized (8). Among the 40 randomized trials evaluated, some were considered adequate to demonstrate the effects of auriculotherapy on pain and preoperative anxiety but many studies were considered as "difficult to evaluate" due to some methodological errors. Better designed studies in the future will provide evidence for the use of auriculotherapy in the treatment of different conditions.

Indications

Auriculotherapy is a very effective treatment method in the treatment of acute and chronic pain, especially musculoskeletal pain (9) but also cancer pain (10). In addition to pain, its effects in the treatment of anxiety and the treatment of a wide variety of functional problems have been shown in medical literature (11).

Future Perspectives

Since legal regulations in most parts of the world do not distinguish between auriculotherapy and auricular acupuncture, physicians who want to practice auriculotherapy must learn traditional chinese acupuncture which requires a long time and effort and they have to learn all the arguments of chinese medicine, which is a complete different medical system based on chinese philosophy. However auriculotherapy depends on classical medicine. It is a treatment modality that can be learned easily by physicians from all branches, without leaving the classical medical thought system and it can be used by each physician in their own medical specialty.

CONCLUSION

Auriculotherapy is an effective treatment option in acute and chronical musculoskeletal pain and many functional problems. There are many studies which demonstrate its effects and its efficacy and mechanism of action would be better understood with better designed future studies. There are differences between the treatment approaches of auriculotherapy and auricular acupuncture. While auriculotherapy approaches the diagnosis and treatment of diseases from the classical medical perspective, the diagnosis and treatments in auricular acupuncture are based on the unique theory of chinese medicine. Seperating auriculotherapy educations from traditional chinese acupuncture certification programs and encouraging the application of this treatment method will produce many positive effects because auriculotherapy offers physicians an effective option to reduce

pain and improve many functional problems, which they can choose for example instead of antalgics and antidepressants in their daily practice.

Conflict of interest: The author declares that there is no conflict of interest.

Financial disclosure: No funding was received in support of this study.

Peer-review: Externally peer-reviewed.

Authorship contributions: Concept, Design, Supervision, Funding: CÖ. Materials, Data collection &/or processing, Analysis and/ or interpretation, Literature search, Writing and Critical review: SÖ.

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