

Available online at www.sciencedirect.com

Journal of Acupuncture and Meridian Studies

journal homepage: www.jams-kpi.com

COMMENTARY

Critical Review and Comments on B.H. Kim's Work on the Primo Vascular System

Miroslav Stefanov^{1,2,*}¹ *Department of Animal Morphology, Physiology and Nutrition, Agricultural Faculty, Trakia University, Stara Zagora, Bulgaria*² *Nano Primo Research Center, Advanced Institutes of Convergence Technology, Seoul National University, Suwon, Republic of Korea*

Available online Aug 24, 2012

Received: Apr 30, 2012

Accepted: Jul 16, 2012

KEYWORDS

anatomy;
Bonghan theory;
morphology;
physiology;
primo vascular system

Abstract

Two periods of primo vascular system (PVS) discovery exist. The first one includes the five reports of B. H. Kim made from 1962 to 1965. The second one is from 2002 until the present time and includes reports made mainly by the Seoul National University group using modern methods. The purpose of this article is to describe the claims in B. H. Kim's reports, to comment on the most important points of his claims, and to offer hypotheses for the morphological architecture and the function of the PVS. The PVS integrated the cardiovascular, nervous, and hormonal systems. Thus, the particularities of the various body systems are combined in the PVS. The PVS is not a simple circulatory system like the cardiovascular system. Its influence on all body systems is a combination of not only substances and signals but also energy and information. The primordial PVS is like a matrix for the vascular and the nervous systems, which are formed around the PVS. The PVS is duplicated by the vascular and the nervous systems in the very early stage of body development. This is the reason why the PVS combines the features of the vascular, the nervous, and the hormonal systems. Subsequently, all embryonic body systems have developed, the primordial PVS remains connected to them, but dominates and controls them as the primeval functional system.

* Corresponding author. Department of "Animal Morphology, Physiology and Nutrition," Agricultural Faculty, Trakia University, Student's Town, 6000 Stara Zagora, Bulgaria.
E-mail: stefanat@af.uni-sz.bg

1. Introduction

Morphological science, as a part of biological sciences, has a great challenge to make new discoveries. Such discoveries in morphology have not been made since the 18th century and need more attention.

A new anatomical system corresponding to the ancient acupuncture meridian was described for the first time in the 1960s by Professor B.H. Kim. He presented five articles [1–5], describing nodes and ducts responding to acupunctural points and meridians and called the nodes and ducts Bonghan corpuscles and ducts. However his findings have not attracted attention and have been neglected by the scientific community.

During the past 10 years, Prof. K.S. Soh and his team at the Seoul National University, South Korea, have made great efforts to confirm the findings of B.H. Kim and to develop methods to detect and identify the new anatomical system [6]. The team's investigations included advanced morphological and physiological methods. They named the new system, the primo vascular system (PVS), and they renamed the channels and nodes as primo vessels (PV) and primo nodes (PN), because the names Bonghan ducts and nodes did not carry scientific meaning. The name "primo" is well chosen because these vessels are primordial vessels that develop from an egg before the blood and the nervous systems.

B. H. Kim's papers do not have full scientific significance because they lack detailed descriptions of the methods used and only presented the main ideas on the existence of the new anatomical system. The Seoul National University team has conducted modern investigations in an attempt to disseminate more information about the PVS through the publication of a series of papers, conferences and society meetings concerning the new system, and by making this subject attractive to many scientists throughout the world.

In this paper, we consider the claims in B. H. Kim's reports, make comments concerning the salient points of his claims, and offer hypotheses on the morphological architecture and the function of the PVS. We will use the conclusions of his five reports as translated by Kim et al [7]. In this paper, we will use the terminology adopted at the International Symposium on the Primo Vascular System, which was held in 2010 [8].

2. The first paper: Study on the reality of the acupuncture meridian (1962)

The conclusion of his rather short and primitive first report in 1962 can be summarized in the following paragraph.

B. H. Kim found the physical substrate of acupuncture points and meridians, including several new points that differ from classical acupuncture points. The author of this review has a comment on the significance his claims.

Comment: If new morphological structures and new acupuncture points exist, the new anatomical system can offer unexpected possibilities concerning not only the morphology but the physiology, biochemistry, and biophysical processes of all body systems, which means that we need a new kind of thinking and understanding of the morphological connections between the various systems in

the body and the functions of all body organs beyond the traditional knowledge of Western medicine and Eastern traditional medicine. The mistrust of Western medicine for Eastern traditional medicine needs to be overcome, and knowledge needs to be combined to achieve a better understanding of and to provide an explanation for the functions in the physiology and the medicine of the new system.

3. The second paper: On the Kyungrak system (1963)

The conclusions of B. H. Kim's second paper can be categorized into eight ideas, and the author's comments on each idea are given.

The PVS is an independent functional morphological system.

Comment: This system is closely related to vascular and lymphatic vessels and to nerves: the directions of the vessels and nerves, the cavities and the channels of the central nervous system (CNS), and the beating of the heart. The PVS also contains hormones and microcells with chromosomes. In fact, the new system integrates the cardiovascular and the nervous system. Thus, the particularities of different body systems are combined in the PVS.

The superficial PVs and extravascular PVs are connected with superficial nodes. The deep PVs are connected between them with intravascular PVs, deep PNs and organ nodes.

Comment: B.H. Kim did not show explicit connections between the PVS in the cardiovascular system and the one in the nervous system. He did not show a concrete relation between external and internal PNs although he stated that the internal PVS had been discovered by tracing the flow of a blue dye injected into the external PVS. In fact, he described three different subsystems without showing the connections between them—the external, internal, and nervous PVs. He clearly indicated that they formed a weblike network, but did not present any data to support that claim. Neither were main organs or organs of the PVS shown. We suggest that the internal and external PV subsystems are functionally connected with the heart and that the heart is the main organ of this part of the PVS. The nervous PV subsystem functionally has the brain as its main organ.

B.H. Kim stated that the superficial PNs had a muscular layer and various cells inside. Their structure was different from that of the deep PNs.

Comment: This description pertains to the glands, not to the nodes. It is probable that the superficial PNs have a structure different from that we have known until the present time.

PNs have many kind of nuclear acids, mainly DNA.

Comment: Probably, the PNs can produce extracellular nuclear acids including DNA which forms one to two chromosomes. When the chromosomes leave the cell, they obtain a membrane. In fact, this would be the exocytosis of DNA. This process would not be regular, but would be

Download English Version:

<https://daneshyari.com/en/article/3098996>

Download Persian Version:

<https://daneshyari.com/article/3098996>

[Daneshyari.com](https://daneshyari.com)