

Triple energizer (san jiao): Actual organ in TCM

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Objective: In Traditional Chinese Medicine (TCM), there is some terminology and spaces that are not yet reported in Western medicine. For example Triple Energizer or San Jiao (TE (SJ)) in TCM are one of the main space which could explain most of the signs and symptoms of patients, signs and symptoms which have being related to mind body disorder in western Medicine. There is a hypothesis, which this space must be an actual space. By considering the embryologic and anatomical view, this report will try to open a door in the mind of reader which shows the presence of TE (SJ) in human body.

Main Points: In embryologic developmental stages, and after gastrulation, there are three layers which are named ectoderm, mesoderm and endoderm. Mesoderm is the origin of many internal organs. It delaminates into two layer of somatic and splanchnic layer with an invisible space between them as coelom. One layer of them will be under the skin and other layer will cover the internal organs. This cavity or space could probably be the same as TE (SJ) and as a cavitary tissue or organ could be like a way for interconnection between internal organs and surface of body. In this case it could explain most mechanisms of acupuncture and traditional medicine.

Conclusion: By tracing of the embryo from the first days of fertilization up to well developed stages, there is clear that there is an invisible space between visible anatomical organs which could be same one as TE (SJ). In other words, this is for the first time which coelom is presented as TE (SJ) in TCM.

Biography

Majid Avijgan completed his M.D. and specialty in Infectious Diseases and Tropical Medicine at Isfahan University of Medical Sciences at 1990. He is professor of Infectious and Tropical Medicine and one of the founders of Traditional Persian-Iranian Medicine department in Isfahan University of Medical Sciences and at present Deputy of department. He is one of the Editor in Chief of Journal of Herbal Drugs and also associate editor in *International Journal of Integrative Medicine*. He has guest lectures at national universities of Iran an, Indian Academy of Acupuncture and Italian Traditional Medicine in Employ. He is interested for establishing a link between Traditional Chinese and Persian-Iranian Medicine to reach to a common point of integrative medicine.

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Anticariogenic activities of some herbal plants with indications for use in the treatment of dental caries

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Dental caries is a chronic infectious disease of the teeth. *Streptococcus mutans* is considered one of the primary causative agents of dental caries in which short chain carboxylic acids are released as its fermentation by-products that demineralize the enamel and lead to cavitation in the tooth. The main virulence factors associated with cariogenicity include adhesion, acidogenicity and acid tolerance. The purpose of this study was to investigate the anticariogenic efficacy of *Prosopis spicigera*, *Trachyspermum ammi*, *Zingiber officinale*, *Nigella sativa* and *Trigonella foenumgraecum*. The *in vitro* antibacterial activities of these plant extracts were investigated by agar-well diffusion method against *Streptococcus mutans*. The minimum inhibitory concentration (MIC) of these extracts was carried out by double diffusion method. Plant extracts giving best activity were tested for their anticariogenic activity. We found that the petroleum ether fraction of *T. ammi* and ethanol fraction of *P. spicigera* significantly reduced the biofilms forming ability of *S. mutans* in a dose dependent manner. The ability to produce acid was also hindered in the presence of these extracts. This study reveals the prospective of *T. ammi* and *P. spicigera* extract as an alternative and complementary medicine for dental caries by inhibiting the virulence factors of *Streptococcus mutans*. These plants may present a useful source for isolation of active compounds (anticariogenic agents) that may hold great potential for use in food additives and mouthwash for preventing and treating dental caries.

Biography

Rosina Khan has recently obtained her Ph.D. in Biochemistry (2012) from J. N. Medical College, Aligarh Muslim University, India. She has eight research papers published in journals of international repute, while three are communicated at present. She has isolated a novel compound from *Trachyspermum ammi* seeds and the patent for the same is under progress.

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