

中医微创技术的精准应用

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中医微创技术是根据中医皮部、经筋、经络、五体及脏腑相关理论,采用特殊针具,对病变部位进行刺、切、割、剥、铲等治疗,常用针具有针刀、带刃针、铍针、水针刀、刃针、钩针、长圆针、拨针等。其治疗要求是以最小的解剖和生理干预获得最好治疗效果,以最低

的生物和社会负担获得最佳的健康保障^[1]。

1 中医微创技术的分类

近 20 年来,经全国几百家医院的协作研究,提炼出系列的特色技术和优势病种,并于 2013 年由国家中医药管理局医政司以《中医医疗技术手册(2013 普及版)》^[2]的形式向全国发布,其内容包括:(1)微创松解术。适用于颈、肩、腰、臀、四肢关节的痹证和痛证,慢性劳损性疾病造成的局部组织增生肥厚或非特异性炎症产生的局部粘连性病变;相对于肢体轴线而言,有垂直和平行 2 种松解术式。(2)微创减张术。适用于外伤、劳倦或风寒湿邪导致的软组织局部高张力性疾病,长期高应力刺激造成的局部筋膜高张力状态形成的痛点、条索、结节或包块。根据针具的不同结构特点,有自外向内刺入和自内向外挑钩 2 种术式。(3)微创减压术。适用于外伤、劳损、炎症造成的有腔器官内高压病变,如筋膜间室高压、骨髓腔水肿、骨髓腔内压增高等。根据作用的组织不同,分为软组织减压术和骨减压术。(4)微创矫形术。适用于一些姿势性、发育性畸形矫正,主要通过动力均衡和静力均衡 2 种方式实现。(5)微创剥离术。适用于骨折、筋伤导致的深层软组织的粘连性疾病。(6)微创分离术。适用于皮部经筋等浅层组织的粘连

性疾病,如外伤出血后的瘢痕形成,手术后的切口局部粘连,根据针具端部结构分为锐性分离和钝性分离 2 种术式。(7)微创触及术。适用于神经肌肉组织功能障碍所致的痉证和痿证。用针具在不同的组织表面进行触及而不侵入组织内部,包括神经根触及术、神经干触及术、肌肉触及术、皮肤触及术、筋膜触及术等。(8)微创刺激术。适用于系统调节的疾病治疗,比如通过刺激足太阳膀胱经的背部腧穴治疗颈性眩晕、脊柱源性消化不良、脊柱源性肠易激综合征等体表内脏相关性疾病,包括经络穴位刺激术、皮肤刺激术、筋膜刺激术、肌肉刺激术、骨膜刺激术^[3-8]。

2 中医微创技术的应用建议

中医微创技术的临床应用丰富了中医的非药物治疗法,取得了很好的疗效,但同时也提出一个重要问题,如何使这些中医微创技术能够精准应用,保证其安全、有效、可持续地深入开展,提出下述建议。

(1)明确指征,有的放矢。任何方法都有其固有的指征,精准的选择来源于对其优缺点的全面了解和深入的掌控,通过与同类技术的比较,确定其针对某种疾病的首选、次选和协同作用,有的放矢地在疾病过程中选择最佳的干预时点和位点。以临床常见的应力集中导致的神经末梢张力性疼痛(皮神经卡压综合征)为例,其治疗方法有 2 类:改变应力状态,为非侵入性,如手法或理疗;改变边界条件,为侵入性,如铍针。前者在没有形成明确的痛点、条索、结节时有效,而一旦形成则后者便成为首选^[9]。

(2)分级管理,系统培训。中医微创技术涉及病种复杂,为保证其安全、有序、可持续发展,应根据其技术难度、实施条件、人员素质进行系统培训,分级管理。它不是简单的行政准入或行业准入,而是先易后难、由简到繁的技术把握,循序渐进,逐步深入地形成诊疗常规。目前有下列病种可供参考:①这类疾

病所需的诊断和鉴别诊断要求条件高,对实施人员的技术水平及熟练程度要求很高,技术内容主要分布在刺激术的范畴,包括脑瘫、颈型眩晕、颈性头痛、颈性胸前区痛、其他脊柱相关疾病。②这类技术的诊断和鉴别诊断要求条件较高,对实施人员的技术水平及熟练程度要求专门培训。技术内容主要分布在矫形术和剥离术的范畴,包括瘢痕挛缩类畸形、先天发育类畸形、项痹病、肩痛证、膝痹病、腰腿痛证、颈椎病、腰椎间盘突出症、股骨头缺血性坏死、强直性脊柱炎。③这类技术的诊断和鉴别诊断无特殊条件要求,对实施人员的技术水平及熟练程度要求专项培训。技术内容主要分布在松解术和减压术的范畴,包括肌肉劳损性疾病,如肩胛提肌、头夹肌、颈夹肌、冈上肌、冈下肌、小圆肌、大圆肌、竖棘肌、上后锯肌、下后锯肌、梨状肌、臀大肌、臀中肌、臀小肌;关节劳损性疾病,如肩周炎、网球肘、腱鞘炎、膝骨关节病、跟痛证等;经筋皮部痛证(皮神经卡压性疾病),如枕大神经卡压综合征、枕小神经卡压综合征、耳大神经卡压综合征、肩胛上神经卡压综合征、颈横皮神经卡压综合征等。

(3)以人为本,勤于实践。中医微创技术的最明

The minimally-invasive techniques of traditional Chinese medicine (TCM) uses different types of acupuncture needles to treat diseased locations with special techniques. These techniques include different methods of insertion and closed incision (press cutting, sliding cutting, scrape cutting, etc.). This needling technique is based on the traditional Chinese medicine theories of *Pi Bu* (cutaneous), *Jing Jin* (sinew), *Jing Luo* (meridian), *Wu Ti* (five body structure components) and *Zang Fu* (organ system). Commonly used needles include: needle *Dao*, needle with edge, *Pi* needle, *Shui* needle, *Ren* needle, *Gou* needle, *Chang Yuan* needle, *Bo* needle and so on.

The principle of this minimally-invasive technique of TCM is to achieve the greatest healing benefit with the least amount of anatomical and physiological intervention. This will result in the highest standard of health care with the lowest rehabilitative need and burden of care.

In the past 20 years, through the collaborative research of several hundred hospitals across China, we systemically reviewed the best minimally invasive technique of TCM and the first line treatments for selective conditions. In 2013, the Department of Medical Affairs of the State Administration of Traditional Chinese Medicine created "Traditional Chinese Medicine Technical Manual" (General Version) and released it nationwide, its contents include: (1) Minimally invasive scar tissue release. ① Suitable for *Bi* and pain syndromes of neck, shoulder, waist, buttocks and extremities. ② Degeneration causes local hypertrophy and inflammation, creating local tissue adhesion. ③ There are two kind inci-

显的特点是不依赖复杂的辅助设备和操作条件,个人的技术、技能和技巧的形成就成为关键的环节。实现这一环节的必要条件是术者对疾病的认知模式和娴熟的操作手法。以患者为中心,以患者病情的客观证据为中心,实事求是,整体把握,不漏细节,敏锐捕捉,瞄准目标,由此及彼、由表及里、从上到下、左右对比,通过主动运动、被动运动、负重运动、辅助被动运动的瞬时中心,确定应力集中点。

操作手法以患者组织的动态响应特点为中心,注意触诊的层次、结构、质地、变形、变位、运动特点、节律变化;实现手摸心会,包括会定位、会定性、会定量、会定时、会定势。准确把握时效、量效;能够区别治疗的局部效应或系统效应;通过手感、针感、灵感的综合判断,实现《黄帝内经·素问》关于“刺骨者无伤筋,刺筋者无伤肉,刺肉者无伤脉,刺脉者无伤皮,刺皮者无伤肉,刺肉者无伤筋,刺筋者无伤骨……刺骨无伤筋者,针至筋而去,及骨也。刺筋无伤肉者,至肉而去,不及筋也。刺肉无伤脉者,至脉而去,不及肉也。刺脉无伤皮者,至皮而去,不及脉也。所谓刺皮无伤肉者,病在皮中,针入皮中,无伤肉也。刺肉无伤筋者,过肉中筋也”的精准治疗要求。

sion methods-press cutting and slide cutting. (2) Minimally invasive fascial tension release. ① Suitable for localized fascial tension caused by trauma, overuse, or wind-cold-dampness, leading to compensatory hyperplasia. ② Long term high-stress stimulation to local fascia creates compensatory hyperplasia, Ashi points, and tissue texture changes (cords, nodules, masses). ③ According to the different structural features of the needles, there are two incision methods: penetrating from the outside to the inside and pulling from inside to outside. (3) Minimally invasive decompression technique. ① Suitable for internal pressure changes within organ cavities caused by trauma, degeneration, inflammation, such as compartment syndrome, bone marrow edema, increased intraluminal pressure in the bone marrow. ② According to the different tissues, it is categorized into soft tissue decompression, and bone decompression. (4) Minimally invasive orthopedic surgery. Applicable to some postural, developmental deformity correction, mainly through the dynamic balance method and/or static balance method. (5) Minimally invasive dissection. Suitable for fractures, tendons injury caused by deep soft tissue adhesion. (6) Minimally invasive separation. ① Suitable for cutaneous, sinew regions, superficial adhesions due to lesions, and local post-operative incision adhesions. ② According to the structure of the needle tip, the methods are divided into sharp separation and blunt dissection. (7) Minimally invasive sustained pressure technique. ① Suitable for neuromuscular dysfunction which causes *JING* (spasm) syndrome and *WEI* (atrophy) syndrome. ② The needle is applied with sustained pressure, without penetrating select tissue surface. This

includes; nerve root sustained pressure technique; peripheral nerve sustained pressure technique; muscle sustained pressure technique; fascial contact procedure; cutaneous sustained pressure technique. (8) Minimally invasive insertion technique. ① Suitable for systemic regulation to treat disease. ② Different organs are connected to different layers of tissue. Therefore, to treat specific conditions, specific tissues must be targeted. ③ For example, back *Shu* points are used to treat vertigo from cervical spine issues, and spinal degeneration associated digestion issue. ④ The internal organs can be regulated by the pathways that runs along the different layers of tissue. The types of stimulation include; meridian acupoint stimulation; cutaneous stimulation; fascia stimulation; muscle stimulation; periosteum stimulation.

The clinical application of these techniques has enriched the drug-free therapies of traditional Chinese medicine and achieved excellent outcomes, but at the same time it also raises an important question. How can we apply these minimally invasive techniques to clinical practice so it can be safe and effective? In addition, how can practitioners, individually and further develop their understanding of this minimally invasive technique progressive manner?

We make the following recommendations:

(1) Clear diagnosis and precise application. Any approach has specific indications and choosing the correct technique comes from a comprehensive understanding of its advantages and disadvantages. Moreover, the accurate application of the technique depends the expertise of the practitioner. Through systematic review and clinical observation, we formulated the First Line Treatment, the Second Line Treatment, and the Third Line Treatment for specific conditions. Using the information gathered from research, practitioners can decide on which point is appropriate to use based on the stage of disease progression. For example, common conditions like the nerve ending tension pain (i.e. cutaneous nerve entrapment syndrome) is caused by stress concentration. There are two types of treatment for this condition: ① Change in the response to stress state (i.e. non-invasive approach such as manual therapy and physiotherapy). ② Change in state of surrounding environment (i.e. invasive approach such as *Pi* Needle). Before tissue texture changes to pain point, cord, nodules, the former approach is effective. Once tissue texture changes, the latter approach is First Line Treatment.

(2) Systematic training and disease progression training. The minimally invasive techniques of traditional Chinese medicine can treat many kinds of disease. To ensure its safety, organization, progressive development, practitioners are trained systematically and manage their treatment approach through disease hierarchy. Moreover, this technique should be conducted according to its technical difficulty, operating conditions, and expertise of the practitioner. The application of minimally invasive techniques of traditional Chinese medicine does not depend on the hospitals' administration system or the regulatory college of medical professionals. The minimally invasive techniques of TCM should be

taught from easy to difficult, simple to complicated, and requires gradual progression by the practitioners. Eventually, the minimally invasive techniques of TCM's diagnostic and treatment protocol can be created. These protocols are currently available for reference: ① Forming diagnosis and differential diagnosis for the conditions below requires expert diagnostic and application skills; cerebral palsy; cervical vertigo; cervical headache; cervical precordial pain; other spine-related diseases. ② The requirements for the diagnosis and differential diagnosis of such techniques are relatively high, and special training is required for the practitioner who performs this technique. The conditions below uses minimally invasive orthopedic surgery and dissection; scar contracture deformity; congenital developmental malformations; cervical *Bi*-syndrome; shoulder pain syndrome; knee *Bi*-syndrome; low back pain; cervical spondylosis; lumbar disc herniation; avascular necrosis of the femoral head; ankylosing spondylitis. ③ There are no special requirements for the diagnosis and differential diagnosis of such techniques, and special training is required for the practitioner who performs this technique. The technical content is mainly decompression and scar tissue release. a) Muscle strain diseases; levator scapulae, splenius capitis, splenius cervicis, supraspinatus, infraspinatus, teres minor, teres major, serratus posterior superior, serratus posterior inferior, piriformis, gluteus maximus, gluteus medius, and gluteus minimus, erector spinae. b) Joint degenerative disorders; frozen shoulder, tennis elbow, tenosynovitis, knee osteoarthritis, and plantar fasciitis. c) *JING-JIN PI-BU* pain syndrome (cutaneous nerve entrapment syndrome); occipital great nerve entrapment syndrome, occipital small nerve entrapment syndrome, great auricular nerve entrapment syndrome, suprascapular nerve entrapment syndrome, transverse cutaneous nerve of neck entrapment syndrome.

(3) People-centred practice. The most attractive feature of the minimally invasive techniques of TCM is that they do not rely on expensive medical equipment and operating conditions. The key to applying this technique is the practitioners' technique, skill, and expertise. The necessary conditions required to successfully apply this technique is ① practitioner understands disease progression and diagnosis; ② practitioners' skill in applying technique. We require patient-centered approach, which uses evidence based approach as the focus. We aim to seek the truth from facts, to understand the comprehensive picture, to include pertinent details, to be observant, to be goal oriented, from one to another, from outside to inside, from top to the bottom, compare right from left, through active movement and passive movements and weight-bearing movements, and assisted passive movements to determine instantaneous centre to diagnose stress concentration points.

The operating technique is based on the response of patient's tissues to this technique. We must pay attention to diagnosis through palpation: layers, structure, texture, deformity, dislocation, movement characteristic, rhythmic changes. To achieve *SHOU MO XIN HUI WU WEI*; position, quantify, quantity, timing, and pattern.

Accurate grasp of timeliness and dose efficiency. Can distinguish between local or systemic effects of treatment. Through comprehensive judgment of hands feeling, acupuncture needle feeling, and inspiration, to achieve the precious treatment requirements as indicated by the “*Huangdi Neijing · Suwen*”: “Puncture the bone without damaging tendons, and puncture tendons without damaging muscles, puncture the muscle without damaging pulse, puncture pulse without damaging skin, puncture skin without damaging muscle. Puncture muscle without damage tendons, puncture tendons without damaging bone... Puncture bone without damaging tendons and it means the needle passes through the tendons and arrives at the bone and work on the bone. Puncture tendons without damaging muscles, and it means the needle passes through the muscles and arrives close to the tendon. Puncture the muscle without damaging pulse and it means the needle passes the pulse and does not touch the muscle. Puncture pulse without damaging skin and it means, the needle passes through the skin without penetrating pulse. Puncture skin without damaging muscle and it means, the disease is in the skin and the needles insert into skin but does not damage muscle. Puncture muscle without damage tendons, and it means, the needle passes through the muscle and arrive on the tendon. Puncture tendons without damaging bone.”

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