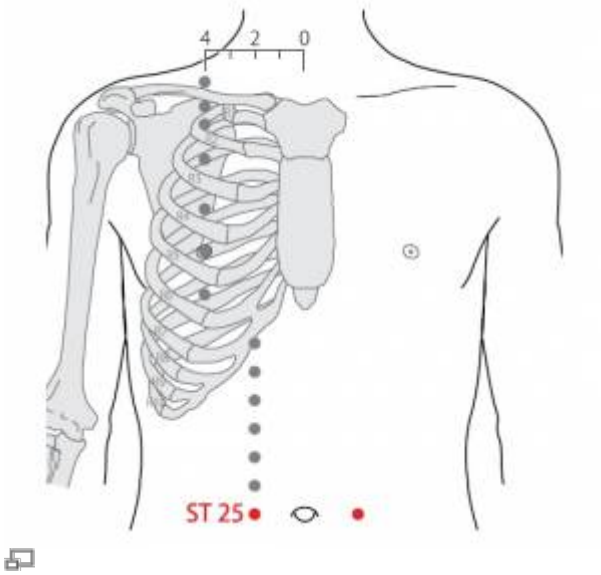
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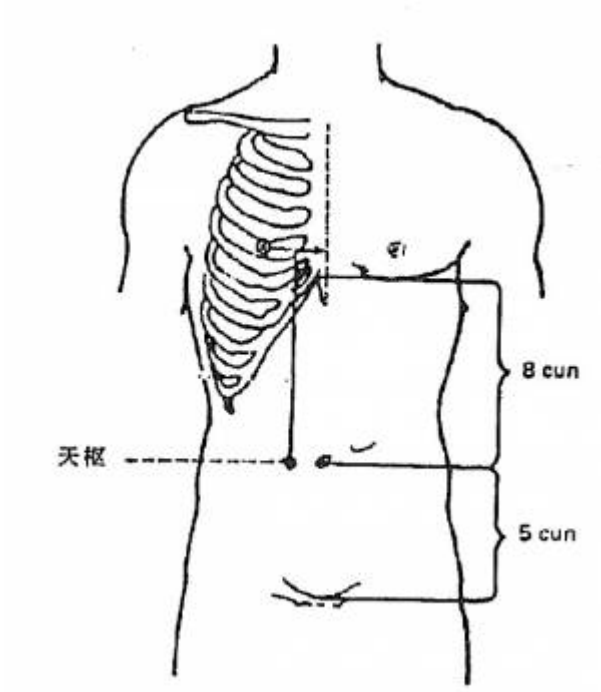
25E Tianshu 天枢［天樞］

prononciation tianshu.mp3

articles connexes: - 24E - 26E - Méridien -



WHO 2009.



Laurent 2000.

1. Dénomination

1.1. Traduction

天枢 **tiānshū**	Charnière céleste (Chamfrault 1954, Nguyen Van Nghi 1971) Axe céleste (Soulié de Morant 1957, Lade 1994) Pivot du ciel (Pan 1993) Pivot céleste (Laurent 2000, Despeux 2012) Pilier céleste (Despeux 2012)

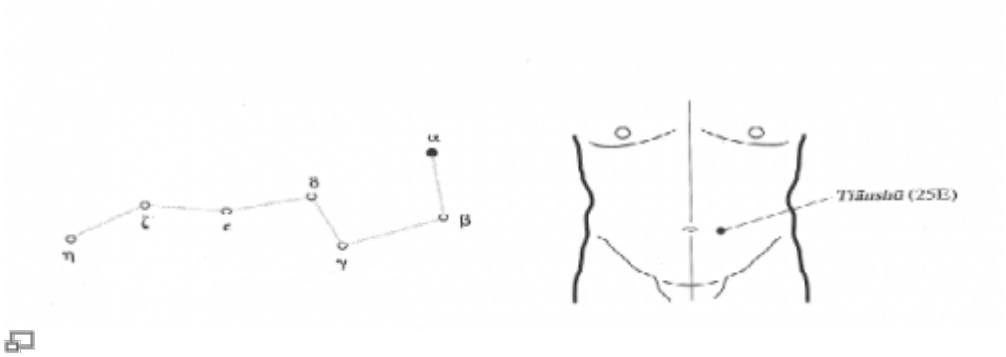
- Zhou Mei-sheng 1984 : *tian* heaven, sky; the upper half of human body ; *shu* pivot; key position.
- *Tian* (Ricci 4938) : firmament, ciel (Guillaume 1995). 天 *tian* : Radical de Kang-xi n°37 + 1 trait ; premier ton (ton haut, assez élevé dans la voix et égal); Le Ciel - Naturel, inné; Cf. 3P *tianfu* (Laurent 2000).
- *Shu* (Ricci 4439-4441) : pivot, gond, point essentiel (Guillaume 1995). 樞 *shu* : Radical de Kang-xi n°75 + 11 traits ; premier ton (ton haut, assez élevé dans la voix et égal) ; Pivot - Point essentiel ; forme simplifiée : 枢 ; disposer des objets *pin* 品 dans un coffre 匚 en bois *mu* 木. Le caractère évolue vers l'idée de ce qui est essentiel pour que les objets puissent être disposés dans le coffre, c'est-à-dire ce qui en permet l'ouverture : pivot, gond ; cheville ouvrière ; point essentiel, fondamental; cardinal ; principal (Laurent 2000)

1.2. Origine

- Ling shu, chapitre « Mesures des os » (Guillaume 1995).

1.3. Explication du nom

- Zhou Mei-sheng 1984: *Tianshu* The position of the point is the juncture of the upper part (heaven, sky) and the lower part (ground) of human body. *Tianshu* is also the name of a star—the first star of the Plough, meaning the pivot of the sky and the ground.
- Ellis 1989 : Essential Questions states: “[The area] above the celestial pivot is ruled by celestial *qi*; [the area] below the celestial pivot is ruled by the earthly *qi*. The place where these *qi* intersect is the origin of man's *qi* and the ten thousand things.” This quotation shows that the junction of celestial and earthly *qi* in the body is the Celestial Pivot. The point name refers to the point's location in the center of the body and to its relative importance as a juncture of celestial and earthly *qi*. 天樞 *tian shu* is the ancient name of the central star in the Northern Dipper; the other six stars in that constellation rotate around it. The Essential Questions states that “the upper body has three *qi*'s, this is the celestial part, and is ruled by celestial *qi*; the lower body has three *qi*'s and is ruled by earthly *qi*.” The three stars above and below the Celestial Pivot are representative of the three *qi*'s above and below ST-25. The numerous alternate names for ST-25 provide a good sample for the study of the effects of mistranscription on acupuncture point names.
- WHO 1993 : The region above the navel is considered as the heaven, pertaining to *Yang*, and the region below it as the earth, pertaining to *Yin*. The point is on the level with the navel, like a pivot between heaven and earth.
- Pan 1993 : le point *Tianshu* se trouve à 2 distances en dehors du nombril. *Tianshu* est le nom chinois de l'étoile a de la Grande Ourse, celle qui, vue de la Terre, demeure immobile alors que les six autres décrivent une rotation autour d'elle. Elle est considérée comme le « Pivot du Ciel ». La partie du corps qui se trouve au-dessus du point *Tianshu* est régie par le Ciel, la partie inférieure à ce point est régie par la Terre. *Tianshu* est le point de rencontre du *Qi* du Ciel et du *Qi* de la Terre. Il constitue le pivot qui gouverne la montée et la descente du *Qi* dans le corps.



Tianshu (E25) : Pivot du Ciel. La Grande Ourse. L'étoile *Tianshu* est le pivot du Ciel (Pan 1993)

- Lade 1994 : Le nom fait référence à la localisation de ce point et à sa zone d'influence. Ce point est situé à l'horizontale de l'ombilic et de VC-8, "Porte du Palais de l'Esprit", la porte d'entrée de l'Esprit et des énergies héréditaires (*Qi* Originel, Essence, *Qi* Ancestral, etc.) qui sont en relation avec le stade prénatal du développement de l'homme. *Tian shu* est aussi l'ancien nom d'une des étoiles de la constellation de la Petite Ourse, qui était considérée comme une étoile polaire avant que la précession des équinoxes ne l'éloigne du pôle véritable. Ceci évoque la localisation du point, légèrement décentré par rapport à l'ombilic.
- Laurent 2000 : se rapportant à la théorie du *yin/yang* le Suwen, au chapitre 68 dit : "au-dessus du *tianshu* l'énergie du Ciel gouverne, au-dessous de *tianshu* l'énergie de la terre gouverne", la région de l'ombilic marque la séparation, la charnière. En astronomie chinoise, *tianshu* est l'étoile polaire, on la considère comme l'étoile fixe, les autres se déplaçant autour d'elle ; la région ombilicale est le centre du corps, toutes les autres structures l'entourent. Dao De Jing : " Trente rayons se joignent en un moyeu unique, ce vide dans le char en permet l'usage ".

1.4. Noms secondaires

Chángxī	长溪［長溪］(1)	Longue vallée (Laurent 2000)	Long Ravine (Ellis 1989)	Ling shu (Guillaume 1995)
Chánggǔ	长谷［長谷］(2)	Long réseau (Laurent 2000)	Long Grain (Ellis 1989)	Zhong guo zhen jiu xue tu jie ci dian (Guillaume 1995)
Changji			Long Chicken (Ellis 1989)	
Changwei			Long link (Ellis 1989)	
Gǔmén	谷门［谷門］(3)	Porte des céréales (Laurent 2000)	Valley Gate (Ellis 1989)	Jia yi jing (Guillaume 1995)
Xúnyuán	循元 (4)	Longe l'origine (Laurent 2000)		Yi xue gang mu (Guillaume 1995)
Bǔyuán	补元［補元］(5)	Tonifie l'origine (Laurent 2000)		Yi xue gang mu (Guillaume 1995)
Buyu			Origin Supplementer (Ellis 1989)	
Xun ji	循际[循際］(6)	Longe la frontière (Laurent 2000)	Cycle Border (Ellis 1989)	Qian jin yao fang (Guillaume 1995)
Xun ji	循脊 (7)			Ji cheng (Guillaume 1995)
Dàchángmù	大肠募[大腸募］	Point *mu* du GI		Laurent 2000

1. *Chang* (Ricci 213) : long / *Xi* (Ricci 1831-1803) : torrent, rivière encaissée.

2. *Chang* (Ricci 213) / *Gu* (Ricci 2720) : vallée, ravin, gouffre.
3. *Gu* (Ricci 2720) / *Men* (Ricci 3426) : porte, portail, voie d'accès.
4. *Xun* (Ricci 2113) : suivre, longer, se conformer, obéir, procéder par ordre / *Yuan* (Ricci 5971) : principe, commencement, origine, premier, principal.
5. *Bu* (Ricci 4161) : rapiécer, ravauder, réparer, suppléer, aider / *Yuan* (Ricci 5971).
6. *Xun* (Ricci 2113) / *Ji* (Ricci 440) : se rencontrer, union, jonction, liaison, occurrence
7. *Xun* (Ricci 2113) / *Ji* (Ricci 423) : épine dorsale, colonne vertébrale, arête.

1.5. Autres Romanisations et langues asiatiques

- t'ien chou, Tienn-tchrou (fra)
- t'ien shu (eng)
- Thiên xu (viet)
- cheon chu (cor)
- ten sū (jap)

1.6. Code alphanumérique

- 25E - ES25 (Estomac)
- ST.25 - ST25 (Stomach)

2. Localisation

2.1. Textes modernes

- Nguyen Van Nghi 1971 : Sur l'abdomen, sur la ligne horizontale passant par le nombril, à deux distances de celui-ci.
- Roustan 1979 : à 2 distances en dehors de l'ombilic.
- Deng 1993 : sur l'abdomen, à 2 *cun* à l'extérieur du nombril.
- Pan 1993 : *Tianshu* se trouve à 2 distances en dehors du nombril.
- Guillaume 1995 : À 2 distances en dehors de l'ombilic, sur le muscle grand droit de l'abdomen.
- Laurent 2000 : à 2 *cun* en dehors de l'ombilic, sur les grands droits de l'abdomen.
- WHO 2009 : On the upper abdomen, 2 B-*cun* lateral to the centre of the umbilicus.

Items de localisation

- Abdomen
- Ombilic
- Grand droit de l'abdomen

2.2. Textes classiques

- Jia Yi Jing : A 1,5 *cun* de *Huangshu* (16Rn), dans la dépression qui se situe à 2 *cun* en dehors du nombril (Deng 1993).
- Ju Ying : A 0,5 *cun* de *Huangshu* (16Rn), dans la dépression qui se situe à 2 *cun* en dehors du nombril (Deng 1993).

- Da Cheng : A 1 *cun* de *Huangshu* (16Rn), dans la dépression qui se situe à 2 *cun* en dehors du nombril (Deng 1993).
- Deng 1993 : Tous les ouvrages de médecine fixent ce point à côté de *Huangshu* (16Rn), même s'ils ne sont pas d'accord pour dire s'il se situe à 0,5 *cun*, 1 *cun* ou 1,5 *cun* de *Huangshu* (16Rn). “Dans la dépression qui se situe à 2 *cun* en dehors du nombril” est l'indication la plus couramment acceptée pour localiser le point. Les différentes écoles ont chacune leur estimation de la distance entre *Tianshu* (25E) et *Huangshu* (16Rn) d'une part, et *Qichong* (30E) et *Henggu* (11Rn) d'autre part. En effet, elles ne s'accordent pas sur la distance entre le méridien *Ren* et le méridien des Reins *Shaoyin* du pied (Voir *Henggu*, 11Rn).

2.3. Rapports anatomiques

- Roustan 1979 : Branches du 10° nerf et des 9° artère et veine intercostalis.
- Deng 1993 : Peau—tissu sous-cutané—gaine antérieure du muscle droit de l'abdomen—muscle droit de l'abdomen. Dans la couche superficielle, on trouve les branches cutanées externe et antérieure des branches antérieures des neuvième, dixième et onzième nerfs thoraciques, et le réseau veineux périombilical. Dans la couche profonde, on trouve les anastomoses des artères et veines épigastriques supérieures et inférieures, et les branches musculaires des branches antérieures des neuvième, dixième, onzième nerfs thoraciques.
- Guillaume 1995 : Artère et veine épigastriques supérieures et inférieures. Branches musculo-cutanées antérieures des nerfs thoraciques.

2.4. Coupes anatomiques

2.5. Rapports ponctuels

	24E	
15Rte	↑ ← **25E** → ↓	16Rn
	26E	
latéral	côté droit	médial

3. Classes et fonctions

3.1. Classe ponctuelle

- Il s'agit du point *mu* du Gros Intestin (Nguyen Van Nghi 1971, Roustan 1979, Pan 1993, Guillaume 1995, Laurent 2000).
- reçoit des ramifications du méridien curieux Tchong Mo (Nguyen Van Nghi 1971).

3.2. Classe thérapeutique

- Tai yi shen zhen : *Tian shu* perméabilise les Intestins et harmonise l'Estomac, régularise le *Qi* et mobilise la stagnation de Sang, il est particulièrement efficace dans les ballonnements (Guillaume 1995).

- Guillaume 1995 : *Tian shu* harmonise l'Estomac et tonifie la Rate, transforme l'humidité, régularise les règles, harmonise le *Qi*.
- Laurent 2000 : point de régulation du Foyer Moyen (*zhong jiao*) selon le Nan jing. Remet en ordre le Centre et harmonise l'Estomac, renforce la Rate pour transformer l'humidité, régularise les menstruations et le *qi*, chasse la chaleur, favorise la libre circulation, resserre le Gros Intestin, traite les parasitoses.

4. Techniques de stimulation

Acupuncture	Moxibustion	Source
Selon Ji sheng ba cui puncturer à 0,5 distance, laisser l'aiguille le temps de 10 expirations. Selon Qian Jin, il s'agit du logis du Hun po et il ne faut pas le puncturer	Selon Tong ren, appliquer 5 cônes de moxa, selon Ji sheng ba cui, appliquer 100 cônes de moxa	Zhen jiu ju ying (Guillaume 1995)
Puncture perpendiculaire entre 1 et 1,5 distance de profondeur	Cautérisation avec 5 à 7 cônes de moxa, moxibustion pendant 10 à 20 minutes	Guillaume 1995
	Moxas : 3 à 7; chauffer 15 à 30 mn	Laurent 2000
Piquer perpendiculairement à 1,5-2,5 distances	Cautériser 5-7 fois, chauffer 10-20 minutes	Roustan 1979

Sensation de puncture

- Roustan 1979 : sensation de gonflement local.

Sécurité

- Liu Zhi-Shun, Duan Jin-Xiu, Yang De-Li, Wang Zi-Chen. Assessment of the operation standard and safety on the individualized deep acupuncture at Tianshu（天枢 ST25) under CT. World Journal of Acupuncture-Moxibustion. 2011. 21(2):31. [165107]. *Traduction anglaise* : Chinese Acupuncture and Moxibustion. 2011;31(2):131-3. [161962].

  > Objective: To discuss the individual operation standard and safety on the deep puncturing at Tianshu (ST 25). Methods: The deep insertion through the peritoneum about 1-2 millimeter was taken as individual standard depth at Tianshu (ST 25) for 39 patients. Using CT cross-section scanning and image surveying, the regression analysis was conducted on the impacts of abdominal circumference (AC,cm) to the peritoneum depth. Results: It was concluded the formula for calculating the satisfactory depth of individual insertion at Tianshu (ST 25), depth = -0.562 + 0.045 x AC. Conclusion: The depth of insertion, 1-2 millimeter through peritoneum at Tianshu (ST 25) is safe and feasible in acupuncture treatment, which can be used significantly as the reference and guidance for the assessment of clinical operation and safety on the deep puncturing of the other acupoints on the abdominal region.

- Avoid strong manipulation of needle. Moxa cones must not be used on pregnant women. (Tai 1987)
- Moxibustion is contraindicated on this point for pregnant women.(Qian Jin Yao Fang - Qiu Mao-liang 1993)
- Lade 1994 : la puncture est contre-indiquée pendant la grossesse.
- If the needle is inserted deeply through the posterior wall of the rectus sheath, the transversus muscle, the external peritoneal adipose tissue and the peritoneum into the peritoneal cavity, it may puncture into the small intestine. Lifting, thrusting and twirling the needle may damage the small intestine. Severe complications can result if a small amount of the intestinal contents drain into the peritoneal cavity, irritating the peritoneum and causing tension and rebound pain

(Chen 1995)

5. Indications

Classe d'usage	★★	point majeur

5.1. Littérature moderne

- Nguyen Van Nghi 1971 : maladies du gros intestin et de la rate dues à la chaleur (énergie perverse), toutes sortes de diarrhées, toutes les affections chroniques de l'estomac et de l'intestin (vomissements, indigestions, borborygmes, ballonnements dysenterie, douleurs (spasmes) de l'intestin, ascite, constipation), toutes les affections gynécologiques (règles irrégulières, dysménorrhée, stérilité).
- Roustan 1979 : gastrite aiguë ou chronique, entérite aiguë et chronique, « parésie intestinale », ascaridiose intestinale, constipation, lombalgie. Vomissements, diarrhée, coliques, leucorrhée, dysménorrhée, stérilité.
- Lade 1994 :
  - Régularise la Rate (surtout le *Qi* et le *Yang*), l'Estomac (surtout le *Qi* et le *Yin*) et les Réchauffeurs Moyen et Inférieur, humecte et régularise les Intestins, produit des Liquides, tonifie le *Qi* Nourricier, réduit les stagnations digestives, clarifie la Chaleur (de l'abdomen), transforme l'Humidité et la Chaleur-Humidité (des Intestins), assèche l'Humidité et le Froid-Humidité, réchauffe le Froid, et régularise le *Qi* et le Sang. Indications : abcès intestinal, troubles dysentériques avec ou sans saignement, hernie, occlusion intestinale aiguë, masses abdominales, ulcères de l'estomac et du duodénum, colite, entérite, appendicite, pancréatite, borborygmes, mauvaise digestion, vomissements, diarrhée, douleur et distension abdominales, constipation due à la Chaleur, selles molles par tuberculose pulmonaire, diarrhée infantile, douleur périombilicale, et œdème.
  - Régularise les menstruations. Indications : stérilité, endométriose, menstruations irrégulières, dysménorrhée, et leucorrhée avec du sang.
  - Expulse les parasites et les calculs des voies urinaires. Indications : parasites intestinaux, et calculs logés dans les voies urinaires supérieures.
- Guillaume 1995 : Douleur qui enserre l'ombilic, ballonnement abdominal avec borborygmes, diarrhée, diarrhée dysentériforme, œdème, constipation, règles irrégulières, pertes blanches ou sanguinolentes, aménorrhée, douleur abdominale du post partum, accumulation abdominale ; entérite aiguë ou chronique, diarrhée dysentériforme d'origine bactérienne, appendicite, oxyurose intestinale, occlusion intestinale, brides intestinales, parésie intestinale.

5.2. Littérature ancienne

- Sheng hui fang : si le *Tian shu* est douloureux, il y a un abcès au Gros Intestin ; s'il y a une enflure à ce niveau, c'est une ulcération du Gros Intestin (Guillaume 1995).
- Ling shu : Chapitre « Des diverses maladies » : « Dans les douleurs abdominales, on pique à gauche et à droite de l'ombilic (*Tian shu*-25E) » (Guillaume 1995).
- Mai jing : « Pouls serré dans le secteur du pouce, douleur sous-ombilicale » (Guillaume 1995).
- Jia yi jing : « Ballonnement abdominal, borborygmes, irruption du *Qi* vers le thorax avec impossibilité de rester longtemps debout ; douleur abdominale, atteinte par le froid en hiver qui provoque de la diarrhée ; douleur de la région péri-ombilicale, mobilité du *Qi* de l'Intestin et de l'Estomac qui engendre une douleur ; indigestion, inappétence, gonflement du corps, douleur

ombilicale », « Ballonnement du Gros Intestin », « *Shan*-hernie de l'ombilic avec douleur péri-ombilicale qui fait souvent irruption vers le Cœur »,« Douleur de l'utérus, irrégularités menstruelles avec des règles qui se prolongent », « Douleur du bas-ventre-*yin shan* », « *Qi shan* avec vomissements répétitifs, œdème du visage et amas du Rein-*ben tun* (syndrome du petit cochon qui court dans le ventre), accès de fièvre et frissons, hyperthermie avec propos incohérents » (Guillaume 1995).

- Qian jin yao fang : « Froid chronique et masses abdominales-*zheng jia* chez les femmes, borborygmes, diarrhée, coliques péri-ombilicales », « Présence de sang dans les crachats et les vomissements, enflure du visage, propos incohérents et délirants », « Dysurie, diarrhée liquide », « Ballonnement abdominal, froid du Rein, masse abdominale-*zheng jia*, diarrhée », « Douleur abdominale diffuse » (Guillaume 1995).
- Qian jin yi fang : « Pesanteur du corps avec difficulté à remuer les quatre membres », « Vomissement de sang » (Guillaume 1995).
- Wai tai mi yao : « Gonflement de la Rate, pesanteur du corps » (Guillaume 1995).
- Ishimpo : Hernie ombilicale avec douleur qui heurte souvent le Cœur ; douleur utérine avec pertes de sang continuelles ; tension abdominale ; borborygmes ; reflux de *Qi* ; indigestion ; inappétence sensation de pesanteur du corps (Guillaume 1995).
- Sheng hui fang : « Pertes blanches ou rouges avec ventre ballonné et dur, indigestion, pâleur du visage » (Guillaume 1995).
- Tong ren : « Irrégularités menstruelles avec présence de caillots », « Diarrhée cholériforme » (Guillaume 1995).
- Yu long jing - Yu Long Ge : « Diarrhée de type Rate » (Guillaume 1995).
- Biao you fu : « Traite le vide et la blessure (de l'interne) » (Guillaume 1995).
- Bai zheng fu : « Associé à *Shui quan*-5Rn, il traite le retard de règles. Selon certains, il peut traiter les douleurs qui enserrent le genou, les tuméfactions de *Qi-qi kuai* intra-abdominales, les diarrhées chroniques, le vide et blessure (de l'interne), le surmenage et la faiblesse ; on peut faire 21 cônes de moxa » (Guillaume 1995).
- Zhen Jiu Ju Ying : amas du Rein-*ben tun* (coliques spasmodiques), diarrhée, ballonnement avec hernie-*shan*, diarrhée glairo-sanguinolente, inappétence, œdème avec ballonnement abdominal et borborygmes, reflux de *Qi* qui fait irruption vers le thorax, impossibilité de rester longtemps debout, accumulation chronique de *Qi* froid-*jiu ji leng qi*, douleur périombilicale tranchante qui de temps en temps fait irruption vers le Cœur, plénitude avec gêne épigastrique-fan man et vomissements, diarrhée cholériforme, atteinte par le froid en hiver avec diarrhée glaireuse, fièvre et frissons dans les maladies pernicieuses-*nue han re*, propos incohérents, consommation excessive de boisson dans le *Shang han*, ballonnement abdominal, dyspnée. Chez la femme, tuméfaction-*zheng jia*, prise en masse de Sang stagnant-*xue jie cheng kuai*, pertes blanches et rouges, irrégularités menstruelles » (Guillaume 1995).
- Yi xue ru men : « Enflure du visage, expectoration de sang, vomissement de sang, propos incohérents, diarrhée cholériforme, diarrhée dysentériforme, indigestion, accumulation-*ji* chronique de *Qi* froid avec douleur péri-ombilicale qui irradie jusqu'au Cœur, douleur et ballonnement abdominal, mobilité du *Qi* de l'Intestin et de l'Estomac qui provoque des douleurs tranchantes, pertes blanches et rouges » (Guillaume 1995).
- Da cheng : Reprend intégralement la citation du Zhen jiu ju ying (Guillaume 1995).
- Commentaire chinois à propos de *Ben tun* : Le syndrome du petit cochon qui court dans le ventre est une des cinq accumulations (*ji*) et correspond à celle des Reins décrite dans le Lingshu, la symptomatologie est due au *Qi* qui monte du bas-ventre jusqu'à la région épigastrique, au thorax et à la gorge, des douleurs abdominales, des accès de froid et de chaleur sont possibles (Guillaume 1995).
- Xun jing : « Tous les cas de froid par vide de la partie inférieure, crampes des extrémités après une diarrhée » (Guillaume 1995).
- Lei jing tu yi : « Amas du Rein-*ben tun* (syndrome du petit cochon qui court dans le ventre) et

diarrhée glairo-sanguinolente ou diarrhée liquide persistante, mauvaise digestion des aliments, œdème-*shui zhong*, ballonnement abdominal, borborygmes, reflux de *Qi* qui fait irruption dans le thorax avec impossibilité de rester longtemps debout, accumulation chronique de *Qi* froid-*jiu ji leng qi* avec douleur tranchante péri-ombilicale qui remonte de temps en temps vers le Cœur, sensation de plénitude et de malaise-*fan man* avec vomissement et diarrhée cholériforme, maladie pernicieuse de type froid-*han nue*, inappétence, amaigrissement et teint jaunâtre. Tuméfaction-*zheng jia* chez la femme avec stagnation de Sang qui se prend en masse-*xue jie cheng kuai*, méno-métrorragies et irrégularités menstruelles, pertes blanches et purulentes-*lin zhou dai xia* » (Guillaume 1995).

- Tai yi shen zhen : « Amas du Rein-*ben tun* (syndrome du petit cochon qui court dans le ventre), diarrhée liquide, diarrhée dysentériforme, borborygmes, douleur péri-ombilicale, dyspepsie, œdème avec ballonnement abdominal, amas chronique de *Qi* froid-*jiu ji leng qi*, tuméfaction-*zheng jia* chez la Femme » (Guillaume 1995).

5.3. Associations

Indication	Association	Source
Enflure du visage	**25E** + 40E + 45E + 43E	Qian jin (Guillaume 1995)
Dysménorrhée	**25E** + 6VC + 7VC	Roustan 1979, Shanghai zhen jiu xue (Guillaume 1995)
Règles en retard	**25E** + 5Rn	Zhen jiu ju ying (Guillaume 1995)
Appendicite	**25E** + 4GI + Lanwei + 37E + 4VC	Zhen jiu xue jian bian (Guillaume 1995)
Parésie intestinale	**25E** + 4VC + 25V	Roustan 1979
Parésie intestinale	**25E** + 6VC + 25V + 31V	Shanghai zhen jiu xue (Guillaume 1995)
Indigestion, inappétence, douleur périombilicale	**25E** + 45E + 44E	Qian jin yao fang (Guillaume 1995)
Diarrhée dysentériforme	**25E** + 37E + 4GI	Zhong guo zhen jiu xue gai yao (Guillaume 1995)
Diarrhée	**25E** + 25V + 36E	Zhong guo zhen jiu xue gai yao (Guillaume 1995)

5.4. Revue des indications

- Ji Qingshan et al. Application of the Point Tianshu on Clinical Pratice. In Selections from Article Abstracts on Acupuncture and Moxibustion, Beijing. 1987;253. [22106].
- Zhang Cheng, Shi Zheng, Huang Qin-Feng, et al. [Commentary on Indications for and the Efficacy of Point Tianshu on the Basis of Traditional Chinese Medical Acupuncture-Moxibustion Information Databank]. Shanghai Journal of Acupuncture and Moxibustion. 2014;33(5):384. [184563].

  > Objective To objectively reflect indications for and the efficacy of point Tianshu by making a statistical analysis and assessment of papers on point Tianshu acupuncture and moxibustion published from 1949 to 2010. Methods A statistical analysis of the data from Traditional Chinese Medical Acupuncture-Moxibustion Information Databank was made using bibliometric methods. Results and conclusions : Point Tianshu-treated disease spectrum was involved in 143 1 pieces of literature with a total of 101 376 cases and included 15 1 kinds of diseases. Of these cases, 94795 were effectively treated, the mean efficacy rate being 93.5%. Treatment with point Tianshu can regulate qi to remove stagnation and reinforce the spleen to harmonize the stomach. The indications are intestinal diseases, obesity and so on. This point is often combined with Zusanli, Zhongwan and Qihai and given acupuncture, moxibustion, and electroacupuncture.

6. Etudes cliniques et expérimentales

6.1. Acné

- Zhang Y-M, Han H-Q. Clinical Observations on Herbal Cake-Separated Moxibustion at Tianshu for Treatment of Acne Vulgaris. Shanghai Journal of Acupuncture and Moxibustion. 2009;28(4):217. [153569].

  To investigate the efficacy of herbal cake-separated moxibustion in treating acne vulgaris. Methods Sixty-two patients with acne vulgaris were treated by herbal cake-separated moxibustion at Tianshu(ST25). The effect was evaluated. Results The cure and marked efficacy rate of herbal cake-separated moxibustion for acne vulgaris was 71.4%. The cure and marked efficacy rate and the cure rate were significantly higher in the patients with less than one year's duration of disease (94.4%, 50.0%) than in the patients with more than one year's (69.2%. 7.7%)(P<0.01). The cure and marked efficacy rate were significantly higher in the patients with gastrointestinal damp-heat than in the patients with lung meridian lung heat(P(0.05). Conclusion The earlier the treatment for acne vulgaris patients, the better the therapeutic effect. The therapeutic effect is better in the patients with gastrointestinal damp-heat than in the patients with lung meridian lung heat.

- Yiming Zhang 张毅明, Qianfei Wu 吴倩扉. Therapeutic Effect Observation on Moxibustion at Tianshu (St 25) for Acne Vulgaris. Journal of Acupuncture and Tuina Science. 2011;9(3):149-151. [161160].

  Objective To observe the clinical efficacy of moxibustion at Tianshu (ST 25) for acne vulgaris. Methods Medicinal cake based on pattern identification was used to conduct moxibustion on Tianshu (ST 25). Results After three courses of treatment, the recovery and marked effect rates reached 83.9%. The recovery and marked effect rates in those within 1-year duration reached 94.4%, including the recovery rate of 50.0%. This result is significantly better than those with longer than 1-year duration (P<0.01). The recovery and marked effect rates of acne vulgaris due to damp-heat in the stomach and intestine were superior to that due to wind-heat in the lung meridian (P<0.05). Conclusion Medicinal cake-partitioned moxibustion can obtain a better effect for acne vulgaris. The earlier the treatment starts, the better the effect gets. In addition, this therapy works better for acne vulgaris due to damp-heat in the stomach and intestine than wind-heat in the lung meridian.

6.2. Gastrite

- Martins MF et al. Efeito dos pontos de acupuntura E-36 (zusanli) E-25 (tianshu) VC-12 (zhongwan) estimulados por electroacupuntura, nas lesoes agudas da mucosa gastrica, produzidas pela indometacina, em ratos wistar. Revista Paulista de Acupuntura. 1997;3(2):67-1. [72132].

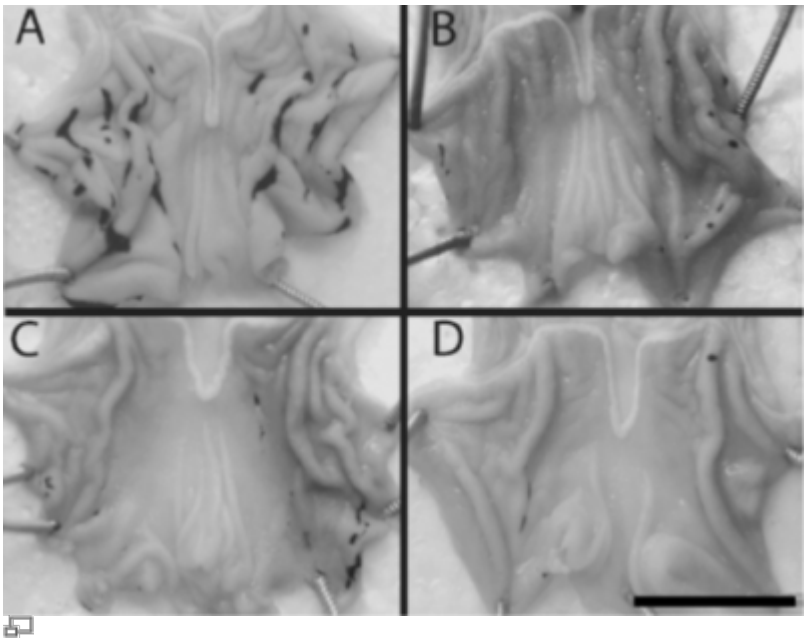
  [Effect of acupuncture points St-36 (Zusanli), St-25 (Tianshu) and Ren-12 (Zhongwan) in acute injuries of the gastric mucosa produced by indomethacin in Wistar rats]. The authors studied the effect of acupuncture points in the prevention of acute injuries to the gastric mucosa produced by indomethacin in rats. Material - 48 Whistar rats, 21 male and 27 female, weighing from 165 to 375 grams. Method - The rats fasted for 24 hours with free access to water and were randomically divided into 3 groups: INDO GROUP - 36 rats that received indomethacin (20 mg/kg - orally); ACP/SHAM GROUP -16 rats that received indomethacin (20 mg/kg - orally) and were immediately applied electroacupuncture (2 Hz for 30 min.) in wrong points, i.e., not real acupuncture points; and ACP GROUP- 16 rats that received indomethacin (20 mg/kg- orally) and were immediately applied electroacupuncture (2 Hz for 30min.)in the following acupuncture points: St-36 (Zusanli), St-25 (Tianshu), and Ren -12 {Zhongwan). Six hours after receiving in domethacin, all rats were anaesthetised for surgical removal of the stomach, and then they were killed. The stomachs were fixated in formalin and submitted to microscopic examination when the number of lesions had been counted (haemorrhagic spots, erosions and ulcers). Results- The ACP group showed less lesions

per stomach than the INDO group, statistically evidencing the efficiency of acupuncture in the prevention of acute gastric injures. The SHAM groups showed less lesions than the INDO group, evidencing that acupuncture in wrong points also has some effect.

- Martin MF et AL. Comparative study of the effect of the acupoints ST-36 (zusanti), ST-25 (tianshu) and Ren-12 (zongwan) in the prevention of acute gastric mucosa injuries produced by indhomethacin in wistar rats. Revista Paulista de Acupuntura. 1998;4(2):83-7. [72731].

  The authors made a comparative study of the effect of acupoints St-25 (Tianshu), St-36(Zusanli) andRen-12(Zongwan), when theyareused separately in the prevention of acute injuries to the gastric mucosa produced by indomethacin in rats. Material - 63 Wistar female rats, weighing from 150 to 225 g. Methods- The rats were fasted for 24 hours with free access to water and were randomized into 4 groups:lNDO GROUP - 9 rats received indomethacin (20 mg/kgorally); St-25 GROUP - 18 rats that received indomethacin (20 mg/kg-orally) and were immediately applied electroacupuncture (2 Hz for 30 min.) in the acupoint St25 (Tianshu); St-36 GROUP - 18 rats that received indomethacin (20 mg/kg-orally) and were immediately applied electroacupuncture (2 Hz for 30 min.) in the acupoint St-36 (Zusanli) and Ren-12 GROUP -18 rats that received indomethacin (20 mg/kgorally) an d were immediately applied electroacupuncture (2 Hz for 30 min.) in the acupoint Ren-12 (Zongwan). Six hours after receiving indomethacin, all rats were anaeshetized for surgical removal of the stomach, and then they were killed. The stomachs were fixed in formalin and submitted to macroscopic examination, when the number of the lesions had been counted (hemorrhagic spots, erosion and ulcers). Results - The St-25 GROUP showed less lesions per stomach than the INDO GROUP, statistically evidencing the efficiency of acupuncture of the acupoint St-25 (Tianshu) in provention of acute gastric injures caused by indomethacin. The other groups showed no statistical difference in the number of the lesions as compared to the INDO group. Conclusion - Acupuncture on St-25 (Tianshu) acupoint showed to be efficient to prevent acute lesions of the gastric mucosa caused by indomethacin, in Wistar rats. Acupuncture on Ren-12(Zongwan) and St-36(Zusanli) acupoints, when used separately, did not show statistical difference in relation to the INDO group.

- Freire A et al. Effect of Moxibustion at Acupoints Ren-12 (Zhongwan), St-25 (Tianshu), and St-36 (Zuzanli) in the Prevention of Gastric Lesions Induced by Indomethacin in Wistar Rats. Digestive Diseases and Sciences. 50(1); 2005.[001]



Effets préventifs de la moxibustion des points 12VC, 25E et 36E sur les lésions gastriques AINS-induites du rat. A) AINS; B) Application d'eau; C) Placebo; D) Moxa (Freire 2005).

  This study was aimed at assessing the physical characteristics underlying the action of moxibustion at acupoints Ren-12 (Zhongwan), St-25 (Tianshu), and St-36 (Zuzanli) in preventing acute injuries of the gastric mucous membrane induced by indomethacin in Wistar rats. Induction of gastric lesions, by means of intragastric administration of indomethacin (100 mg/kg), in adult male Wistar rats was followed by treatment with moxibustion using Artemisia vulgaris dried leaves at 60 or 45◦C, heating with Artemisia

vulgaris charcoal at 50◦C, heating with a regular tobacco cigar at 50◦C, and heating with a regular water pad at 50◦C, The effects of the different heating protocols over the gastric lesions were then compared. In addition, another group of animals was pretreated with capsaicin (100 mg/kg, s.c.), in order to lesion C fibers and, 15 days later, subjected to indomethacin administration and moxibustion treatment. Moxibustion was significantly more efficient at 60◦C than at 45◦C in preventing gastric lesions triggered by indomethacin. Moxibustion applied in acupoints provided a significant reduction of the lesion area, which was two times less than that of animals stimulated in a nonacupoint (sham group). Comparing the therapeutic effects provided by different forms of heating over the gastric lesions, the burning of dry leaves of Artem´ısia vulgaris was significantly more efficient in preventing gastric lesions than moxibustion made with Artem´ısia charcoal or tobacco (cigar) or by heating the animal with a water pad. Desensitization of the afferent sensory C fibers by capsaicin significantly diminished the ability of moxibustion to block the lesions in the gastric mucous membrane. Moxibustion can efficiently prevent indomethacin-induced gastric lesions in rats and this effect is dependent on the temperature, the material used for moxibustion, the use of acupuncture points, and the integrity of C fibers.

6.3. Douleurs intestinales

- Cui Shuli. Clinical Application of Acupoint Tianshu. Journal of Traditional Chinese Medicine. 1992;12(1):52-4. [84285].

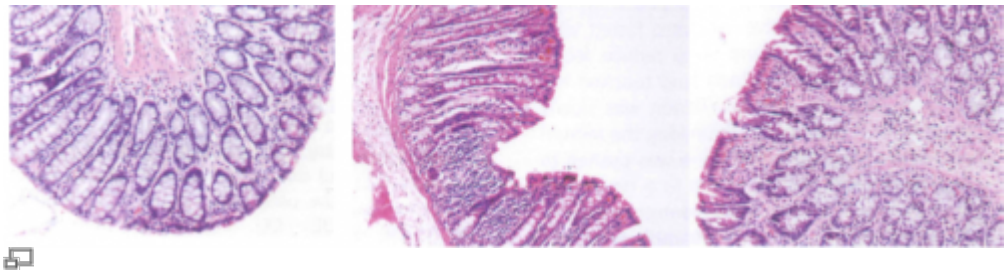
  Acupoint Tianshu (St 25), in combination with other adjuvant points as indicated by symptom differentiation, are very effective in the treatment of diseases of the digestive system. The needles are inserted perpendicularly to a depth of 1-1. 5 cun, according to the thickness of body fat of the patient, and maneuvers of thrusting, lifting and rotation were done for reducing the exuberant type and reinforcing the deficient type. Most patients benefit from this therapeutic modality.

traduction espagnole [36953] ou italienne [36346].

- Zhang Lin-Shan, Shi Yin. [Tianshu Point Applied in Treating Bowel Disease with Acupuncture]. Jiangxi Journal of TCM. 2004;35(12):53. [138080].
- Zhang Zhen. [Clinical Observation on Electro-Acupuncture for Treating 206 Cases of Abdominal Pain with Tianshu and Zusanli as Primary Points]. Chinese Acupuncture And Moxibustion. 1988;8(3):31-2. [22803].
- Huang Yan, Yang Yan-ting, Liu Xiao-xu, et al. Effect of herbal-partitioned moxibustion at Tianshu (ST 25) and Qihai (CV 6) on pain-related behavior and emotion in rats with chronic inflammatory visceral pain. Journal of Acupuncture and Tuina Science. 2015;13(1):1. [187130].

  Objective: To observe the effect of herbal-partitioned moxibustion (HPM) on pain-related behavior and emotion in a rat model of chronic inflammatory visceral pain, and to investigate the mechanism. Methods: Twenty-four male Sprague-Dawley (SD) rats were randomly divided into three groups: a normal group, a model group and an HPM group. Except for the normal group, rats in the other two groups were clystered with mixed liquor of Trinitrobenzene Sulfonic Acid (TNBS) and 50% ethanol to induce the chronic inflammatory visceral pain model. After the models were established successfull rats in the HPM group were treated with HPM at bilateral Tianshu (ST25) and Qihai (CV 6). Rats in the normal group and the model group were only fixed as those in the HPM group without treatment Abdominal withdrawal reflex (AWR) score, mechanical withdrawal threshold (MWT) and thermal withdrawal latency (TWL) were adopted to detect the visceral and somatic pain; meanwhile, open field test (OFT) and elevated plus maze test (EPMT)were employed to evaluate pain emotions such as depression and anxiety. Results: Compared with the normal group, AWR scores of the model group were significantly increased under different stimulus expansion pressure level (P□O.O1), MWT and TWL were significantly decreased (P<O.O5); in OFT, the values of horizontal activities and vertical activities were significantly decreased (P<O.O1); in EPMT the proportion of the number of entry into the open arms (OE%) and that of residence time in the open arms (OT%) significantly decreased (P<O.O1), indicating that the model was successful. Compared with the model group, the AWR score of the HPM group was decreased significantly (P<O.5), MWT and TWL were significantly increased□P< O.05), the values of horizontal activities and vertical activities in the model

group were significantly increased (P<O.O1); in OFT and EPMT, OE% and OT% were significantly increased (P<O.Ol). Conclusion: HPM has analgesic effect on chronic inflammatory viscerai pain. It can reduce the visceral and somatic pain in rats and markedly improve the emotions such as anxiety and depression induced by chronic visceral pain.



Modifications histopathologiques de l'inflammation expérimentale des cellules coliques du rat: à gauche sujets normaux; au centre sujets témoins; à droite sujets avec moxibustion au 25E (Huang 2015).

6.4. Syndrome du colon irritable

Liu Hui-Rong, Wu Huan-Gan, Wang Xiao-Long, et al. Clinical Research of Irritable Bowel Syndrome Treated by Electroacupuncture on Tianshu (St 25). Journal of Acupuncture and Tuina Science. 2007;5(2):91. [151868].

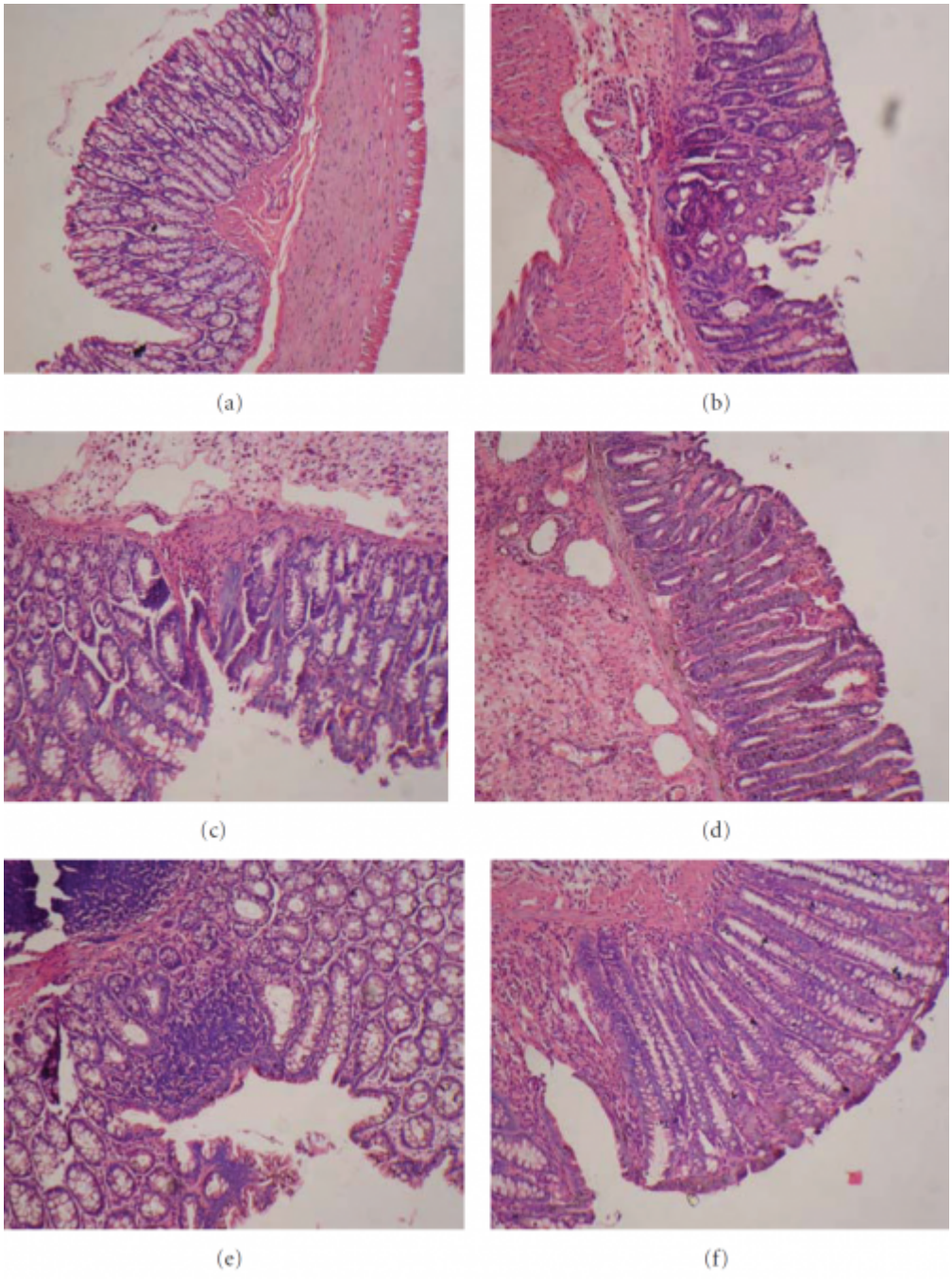
By observing and evaluating the clinical curative effect systematically of electrical acupuncture (EA) on Tianshu (ST 25) on diarrhea-predominant irritable bowel syndrome (D-IBS), to make it benefit for the application and spread of EA on Tianshu (ST 25) on D-IBS. Methods: 103 D-IBS matched the involved standards were allocated into treatment group (EA on ST 25, n=53) and control group (EA on Daheng, SP 15, n=50) in randomized, controlled and single-blind ways. Curative effect differences were analyzed by Ridit analysis. Results: The incidence of diarrhea, abdominal pain, abdominal distention or abdominal discomfort, borborygmus, defecation urgency and defecation incompletion feeling were 100%, 89.3%, 71.8%, 74.8%, 83.5% and 78.6% respectively in D-IBS. Generally, after treatment, 11 cases got excellent results, 34 cases improved and 8 failed in treatment group, totally effective rate was 84.9%; while in control group, 4 cases got excellent effects, 26 improved and 20 failed, totally the effective rate was 60.0%. Conclusion: Compared with control group, EA on Tianshu (ST 25) has a better curative effect on D-IBS.

6.5. Rectocolite hémorragique

- Wang X, Zhou S, Yao W, Wan H, Wu H, Wu L, Liu H, Hua X, Shi P. Effects of Moxibustion Stimulation on the Intensity of Infrared Radiation of Tianshu (ST 25) Acupoints in Rats with Ulcerative Colitis. Evid Based Complement Alternat Med. 2012. [165866].

  ST 25 is a key acupoint used in the treatment of ulcerative colitis by moxibustion stimulation, but the biophysical mechanism underlying its effects is still unknown. The aim of the present study was to explore the biophysical properties of ST25 acupoint stimulated by moxibustion in a rat model of ulcerative colitis. The infrared radiation intensity of fourteen wavelengths of ST 25 showed significant differences between the normal and model control groups. The intensity of infrared radiation of forty wavelengths showed significant differences compared with the corresponding control points in normal rats. The intensity of infrared radiation of twenty-eight wavelengths showed significant differences compared with the corresponding control points in model rats. The intensity of infrared radiation of nine wavelengths in the herb-partition moxibustion group, eighteen wavelengths in the ginger-partition moxibustion group, seventeen wavelengths in the garlic-partition moxibustion group, and fourteen wavelengths in the warming moxibustion group of the left ST 25 showed significant differences compared with that of the model control group. For the right-hand-side ST 25, these values were 33, 33, 2, and 8 wavelengths, respectively. This indicated that one possible biophysical mechanism of moxibustion on ST 25 in ulcerative colitis model rats

might involve changes in the intensity of infrared radiation of ST 25 at different wavelengths.



Aspects histopathologiques de la muqueuse intestinale de la rectocolite expérimentale du rat : (a) sujets normaux; (b) sujets témoins; © sujets moxibustion composée; (d) sujets moxibustion au gingembre; (e) sujets moxibustion à l'ail; (f) sujets moxibustion par infra-rouge (Wang 2015).

6.6. Diarrhée

- Qin Zongshi, Liu Xiaoxu, Liu Zhishun. [ST25 treatment for chronic diarrhea: A meta-analysis]. Modern Journal of Integrated Traditional Chinese and Western Medicine. 2015;25:2753-275. [187049].

Objectives	It is to assess the therapeutic effect and safety of acupuncture ST 25 treatment for chronic diarrhea with a systematic review.

Methods	We searched PubMed, EMBASE, Cochrane Library, Citation Information by National Institute of Informatics (CiNii) , Chinese Biomedical Literature Database (CBM) , Wan - Fang Database , China National Knowledge Infrastructure (CNKI), and from their inception to December 2014. All randomized controlled trials related with acupuncture Tianshu (ST25) for chronic diarrhea were included and meta -analysis would be performed.
Results	Altogether 4 studies were included, including 403 patients. The result showed that acupuncture Tianshu (ST25) had better effect in global assessment than non - acupuncture points [RR=1. 80, 95%CI (1. 51, 2. 13), P<0. 01], and Daheng (SP15) [RR=1. 18, 95%CI (1. 01, 1. 39), P<0. 01], however there was no difference in the curative effect between Tianshu (ST25) and Tzu-sanli (ST36) [RR=1. 08, 95%CI (0. 91, 1. 28), P=0. 39], 4 studies had not mentioned adverse effect .
Conclusions	**Acupuncture Tianshu ST25 is effect to chronic diarrhea** and the it is based on specificity of acupuncture effect , however the degree of evidence is low , more high quality randomized controlled trials related to acupuncture Tianshu ST 25 for chronic diarrhea and long terms follow-up are needed.

- Li Guiman et al. [Block of Points Tianshu (St 25) and Zusanli (St 36) for 300 Cases of Infantile Diarrhea in Autumn]. Shanghai Journal of Traditional Chinese Medicine. 1989;12:22. [50261].

6.7. Constipation

- Li P, Luo Y, Wang Q, Shu S, Chen K, Yu D, Fan C. Efficacy and Safety of Acupuncture at Tianshu (ST25) for Functional Constipation: Evidence from 10 Randomized Controlled Trials. Evid Based Complement Alternat Med. 2020. [214005]. doi

Objective	To evaluate the evidence for the efficacy and safety of acupuncture at Tianshu (ST25) for functional constipation (FC).
Methods	We systematically searched seven databases to identify randomized controlled trials of acupuncture at ST25 alone or in combination with conventional therapy in the treatment of FC. Risk ratios (RRs) and mean differences (MDs) were calculated using RevMan 5.3 with 95% confidence interval (CI).
Results	The study included **ten trials with 1568 participants**. Meta-analysis showed that the Cleveland Constipation Score (CCS) for deep needling was significantly lower than that for lactulose (deep needling with low-frequency dilatational wave: MD -0.58, 95% CI -0.94 to -0.22; deep needling with sparse wave: MD -3.67, 95% CI -6.40 to -0.94; deep needling with high-frequency dilatational wave: MD -3.42, 95% CI -5.03 to -1.81). Furthermore, CCS for shallow needling with high-frequency dilatational wave was lower than that for lactulose (MD -1.77, 95% CI -3.40 to -0.14). In addition, when deep needling was combined with high-frequency dilatational wave, the weekly frequency of spontaneous defecation (FSD) was significantly higher than that for lactulose (MD 1.57, 95% CI 0.93 to 2.21). Colonic Transit Time (CTT) scores were significantly higher when deep needling was combined with sparse wave (MD -14.36, 95% CI -18.31 to -10.41) or high-frequency dilatational wave (MD -11.53, 95% CI -19.25 to -3.81). The time of first defecation after treatment (TFD) of the shallow needling therapy was significantly longer than that of the lactulose (MD 13.67, 95% CI 5.66 to 21.67). The CCS 6 months after treatment (CCS6m) for deep needling was significantly lower than that for lactulose (MD -4.90, 95% CI -5.97 to -3.84). Moreover, the FSD 6 months after treatment (FSD6m) for shallow needling was significantly higher than that for lactulose (MD 0.49, 95% CI 0.02 to 0.97). The adverse event (AE) rate for lactulose was significantly higher than that achieved with the needling treatments, and this held true for both deep needling therapy (RR 0.41, 95% CI 0.23 to 0.72) and shallow needling therapy (RR 0.33, 95% CI 0.15 to 0.77).

Conclusions	The meta-analysis demonstrates that acupuncture at ST25 appears to be more effective than lactulose in the treatment of functional constipation. This was found to be especially true for deep needling with high-frequency dilatational wave, which had a greater impact on improving CCS, FSD, CTT, and CCS6m. Additionally, acupuncture at ST25 was shown to be safer than conventional treatment, with the rate of AE being significantly lower for both deep needling and shallow needling.

- Wu J Liu B, Li N, Sun J, Wang L, Wang L, Cai Y, Ye Y, Liu J, Wang Y, Liu Z. Effect and safety of deep needling and shallow needling for functional constipation: a multicenter, randomized controlled trial. Medicine (Baltimore). 2014;93(28). 177371.

  Acupuncture is widely used for functional constipation. Effect of acupuncture might be related to the depth of needling; however, the evidence is limited. This trial aimed to evaluate the effect and safety of deep needling and shallow needling for functional constipation, and to assess if the deep needling and shallow needling are superior to lactulose.We conducted a prospective, superiority-design, 5-center, 3-arm randomized controlled trial. A total of 475 patients with functional constipation were randomized to the deep needling group (237), shallow needling group (119), and lactulose-controlled group (119) in a ratio of 2:1:1. Sessions lasted 30 minutes each time and took place 5 times a week for 4 weeks in 2 acupuncture groups. Participants in the lactulose group took lactulose orally for 16 continuous weeks. The primary outcome was the change from baseline of mean weekly spontaneous bowel movements (SBMs) during week 1 to 4 (changes from the baselines of the weekly SBMs at week 8 and week 16 in follow-up period were also assessed simultaneously). Secondary outcomes were the weekly SBMs of each assessing week, the mean score change from the baseline of constipation-related symptoms over week 1 to 4, and the time to the first SBM. Emergency drug usage and adverse effects were monitored throughout the study.SBMs and constipation-related symptoms were all improved in the 3 groups compared with baseline at each time frame ($P<0.01$, all). The changes in the mean weekly SBMs over week 1 to 4 were 2 (1.75) in the deep needling group, 2 (1.75) in the shallow needling group, and 2 (2) in the lactulose group ($P>0.05$, both compared with the lactulose group). The changes of mean weekly SBMs at week 8 and week 16 in the follow-up period were 2 (2), 2 (2.5) in the deep needling group, 2 (3), 1.5 (2.5) in the shallow needling group, and 1 (2), 1 (2) in the lactulose group ($P<0.05$, all compared with the lactulose group). No significant difference was observed among the 3 groups regarding the score changes of straining, incomplete evacuation, abdominal distention during spontaneous defecating, or Cleveland Clinic Scores over week 1 to 4. However, the lactulose group got better effect than other 2 acupuncture groups in improving stool consistency ($P<0.01$, both) and shortening the time to the first SBM ($P<0.05$, both). The percentage of emergency drugs used in the 2 acupuncture groups were both lower than in the lactulose group at each time frame ($P<0.01$, all). No obvious adverse event was observed in the deep or shallow needling group.Deep and shallow needling at Tianshu (ST25) can improve intestinal function remarkably and safely. Therapeutic effects of deep and shallow needling are not superior to that of lactulose; however, the sustained effects of deep and shallow needling after stopping the acupuncture treatments are superior to the therapeutic effect of lactulose, which might qualify the superiority of deep and shallow needling.

- Duan Jin-Xiu, Peng Wei-Na, Liu Zhi-Shun. [Clinical observation on the treatment of slow transit constipation by deeply inserting tianshu acupoint]. Shanghai Journal of Acupuncture and Moxibustion. 2010;29(10):631. (chi). [179698].

  Objective: This study was to evaluate the efficacy of acupuncture in the treatment of slow transit constipation (STC) by deeply inserting Tianshu (ST25) acupoint. Methods A total of 120 patients with STC were randomly allocated to a deep-insertion group, a conventional-acupuncture group and a Western medicine group. The clinical efficacy of the three groups were evaluated by observing the spontaneous defecation time, the constipation score and relevant symptom score of pre-treatment and 4 weeks post-treatment. Results: The deep-insertion group had a better result in the improvement of the relevant symptom score than the conventional-acupuncture and Western medicine groups, and the difference was statistically significant ($P<0.01$). Compared with the other two groups, the deep-insertion group had advantage in reducing unsuccessful defecation frequencies and abdominal pain and had a marked real-time effect. Conclusion The acupuncture therapy by deeply inserting Tianshu (ST25) had better result in the management of the clinical symptoms of STC than the Western medicine (Lactulose) and conventional acupuncture treatments.

- Liu Zhi-Shun , Zheng Cheng-Zhe, Zhang Wei , et al . [Observation on the Short-Term Therapeutic Effect of Deep-Needling Tianshu (St 25) on Senile Constipation]. Chinese Acupuncture and Moxibustion. 2004;24(3):155. [130051].

  Objective To assess the short-term therapeutic effect of deep needling Tianshu (ST 25) on senile constipation. Methods Randomly single-blind placebo prospective study method was adopted. The short-term therapeutic effects of deep needling Tianshu (ST 25) and routine-depth needling Tianshu (ST 25) on senile constipation were compared and the safety of deeply needling Tianshu (ST 25) was preliminarily assessed. Results The total effective rate and the short-term cured rate were 100. 0% and 57. 7% in the deep-needling group. and 38. 0% and 0 in the routine depth needling group, respectively, with significant difference between the two groups. and deep-needling Tianshu (ST 25) was safe. Conclusion Deep-needling Tianshu (ST 25) is a better method for treatment of senile functional constipation.

- Zhang Wei, Liu Zhi-Shun, Wang De-Wen. [Treatment of Colonic Slow Transport Constipation by Deep Puncture of Tianshu Point:A Clinical Observation of 15 Cases]. New Journal of TCM. 2004;36(12):36. [139591].
- Zhang Wei, Liu Zhi-Shun, Guo Jun. Clinical Research Evaluation on the Therapeutic Effect of Deep Puncture of Tianshu (St 25) for Slow Transit Constipation. World Journal of Acupuncture-Moxibustion. 2005;15(3):3. [135794].

  Objective: To evaluate the short-term and middle-long-term therapeutic effects of deep puncture of Tianshu (X 4ST 25) for slow transit constipation (STC). Methods: Sixty cases of STC patients were evenly randomized into acupuncture group and medication group. In acupuncture group, electroacupuncture (EA, 20 Hz, continuous waves and tolerable strength) was applied to bilateral Tianshu (ST 25) for 30 min after deep puncture. The treatment was given once daily, 5 sessions every week, two weeks altogether. Patients of control group were ordered to take Lactulose (10 mL/time, b. L d), two weeks altogether. Cleveland Constipation Score (COS) and colonic transit time (CCT) were used to evaluate the therapeutic affect. Results: Alter treatment, both CCS and CCT showed that the therapeutic affect of acupuncture group was significantly superior to that of medication group (P< 0.05) . Six-months' follow up showed that the therapeutic effect of acupuncture still maintained in 13 of the 22 cases visited, while that of control group only maintained in 1 of the 19 cases. Conclusion: The therapeutic effect of deep puncture of Tianshu (ST 25) for STC is definite and has a middle-long-term effect. The patients have no any unfavorable reactions.

- Zhang W, Liu ZS. [Treatment of 30 Patients with Colic Slow-Transport Constipation by Deep Puncture of Point Tianshu]. Shanghai Journal of Acupuncture and Moxibustion. 2005;24(10):26. [142601].

  Objective To as certain the curative effect of deep puncture of point Tianshu (ST 25) on colic slow-transport constipation. Methods There were altogether 30 patients with colic slow-transport constipation. Clinical score and colis transport time (CU) were compared between pretreatment and 2 weeks after treatment in thc constipation patients. Results A comparison between pretreatment and 2 weeks after treatment showed that the curative effects on constipation evaluated according to both clinical score and colic transport time were, significantlY better in the teatment group of patients than in the control group (P <0.01) There was no adverse reaction in the patients. Conclusion The short-term curative effect of deep puncture of point Tianshu on colic slow-transport constipation is exact. There was no adverse reaction in the patients.

- Wang CW, He HB, Li N, Wen Q, Liu ZS. [Observation on Therapeutic Effect of Electroacupuncture at Tianshu (St 25) with Deep Needling Technique on Functional Constipation]. Chinese Acupuncture and Moxibustion. 2010;30(9):705-8. [155088]. *traduction anglaise* Wang CW, Li N, He HB, Lü JQ, Liu ZS. [Effect of Electroacupuncture of Tianshu (St 25) on The Rational Symptoms of Functional Constipation Patients and Evaluation]. Acupuncture Research. 2010;35(5):375-9. [156538].

  Objective: To observe the effects of electroacupuncture (EA) of Tianshu (ST 25) and medication on the subjective symptoms and the satisfactory degree of functional constipation (FO) patients, and to evaluate the efficacy of different depth-needling.Methods: Single-blind, randomized and parallel-controlled methods were adopted in the present study and a total of 95 FC patients were randomly divided into medication

group (Lactulose, 20-30 mL/d, n = 24), deep needling (DN, about 45 mm beneath the skin) of ST 25 group (n = 48), and shallow needling (SN, about 5 mm beneath the skin) of ST 25 group (n = 23). The treatment was given once daily (except weekends) for 4 weeks. The actual number of patients whose defecation frequency was up to 4 times per week, the integrative score of defecation symptoms (defecation exertion degree, abdominal pain, etc.), and the patients' satisfaction degree after the treatment were recorded and evaluated.Results: One, 2, 3 and 4 weeks after the treatment, of the 48, 23 and 24 cases in DN, SN and medication groups, the numbers of FC patients whose defecation was up to 4 times per week were 31 (64.58%), 32 (66.67%), 34 (70.83%) and 37 (77.08%), 9 (39.13%), 16 (69.57%), 15 (65.22%) and 14 (60.87%), and 8 (33.33%), 7 (29.17%), 5 (20.83%) and 4 (16.67%), respectively. The effects of DN and SN groups were significantly superior to those of medication group in increasing the number of FC patients whose defecation was up to 4 times per week, improving constipation symptom integrative score (defecation exertion degree, survival desire for defecation, abdominal distension, etc.) and patients' satisfaction degree ($P < 0.05$). Comparison between DN and SN groups showed that the effects of the former group in accelerating the improvement of survival desire for defecation, patients' satisfaction degree were markedly superior to those of the latter group ($P < 0.05$). Conclusion: Deep needling-EA of ST 25 has a positive effect in improving functional constipation, being faster in the onset of action and stable efficacy in comparison with shallow needling.

- Jinxiu Duan 段锦绣, Weina Peng 彭唯娜, Zhishun Liu 刘志顺, Deli Yang 杨德莉, Jun Guo 郭郡, Hengjing Cai 蔡姮婧. Clinical Study on Deep Insertion at Tianshu (St 25) For Colonic Slow Transit Constipation. Journal of Acupuncture and Tuina Science. 2011;9(1):46-50. [161028]. Objective To observe the clinical effect of deep insertion at Tianshu (ST 25) for colonic slow transit constipation (STC). Methods 120 cases of STC patien

  ts were randomly divided, 60 cases in a deep insertion group, 30 cases in an electroacupuncture group and 30 cases in a medication group by 2:1:1 ratio. The deep insertion group was treated with deep insertion at Tianshu (ST 25). The electroacupuncture group was treated with routine insertion at Tianshu (ST 25). The medication group was treated with oral administration of Lactulose oral liquid. The first voluntary defecation time, and constipation scores before the treatment, four weeks after the treatment and relevant scores of clinical symptoms were assessed in the three groups of the patients. Results The scores of the clinical symptoms in improvement of constipation were better in the deep insertion group than in the electroacupuncture group and medication group, with differences in statistical significance ($P<0.01$). The unsuccessful numbers in the improvement of defecation and abdominal pain were also better in the deep insertion group than in the other two groups, and better in instant effect in the deep insertion. Conclusion The improvement of STC clinical symptoms was better by deep insertion at Tianshu (ST 25) than by medication and routine acupuncture method at Tianshu (ST 25).

- Peng WN, Wang L, Liu ZS, Guo J, Cai HJ, Ni JN, Duan JX, Yang DL. [Analysis on Follow-Up Efficacy and Safety of Slow Transit Constipation Treated With Individualized Deep Puncture at Tianshu (St 25): A Multi-Central Randomized Controlled Trial]. Chinese Acupuncture and Moxibustion. 2013;33(10):865-9. [162414].

  Objective: To evaluate the follow-up efficacy and safety on slow transit constipation (STC) treated with individualized deep puncture at Tianshu (ST 25). Methods: One hundred and twenty-eight cases of STC were randomized into a deep puncture group (64 cases), a western medication group (31 cases) and a shallow puncture group (33 cases) at the ratio of 2:1:1. In the deep puncture group, electroacupuncture of deep puncture was applied to bilateral Tianshu (ST 25). The needle was inserted perpendicularly and slowly at the acupoint and went deeply till penetrating the peritoneum, about 20 to 65 mm in depth. In the western medication group, lactulose oral liquid was prescribed for oral administration. In the shallow puncture group, electroacupuncture of shallow puncture was done at bilateral Tianshu (ST 25). The needle was inserted perpendicularly and slowly, 5 to 8 mm in depth. The treatment lasted 4 weeks in the three groups and the follow-up visit of 12 weeks and 6 month after treatment was performed respectively. The weekly defecation frequency, patient's satisfaction and safety of deep puncture at Tianshu (ST 25) were assessed before and after treatment in each group. Results: In the deep puncture group, the weekly defecation frequency was (1.79 +/- 1.05) times/week before treatment and was (3.90 +/- 1.43) times/week after 4-week treatment. It was (3.49 +/- 1.46) times/week in 12-week follow-up visit after treatment and was (3.51 +/- 1.42) times/week in 6-month follow-up visit after treatment. In the deep puncture group, the improvements in weekly defecation frequency, patient's satisfaction and short-term efficacy were same as those in the western medication group and the shallow puncture group (all $P > 0.05$). The long-term

efficacy in follow-up visit was better remarkably than that in the western medication group (P < 0.05, P < 0.01). Besides, the combined medication was reduced and no adverse reaction occurred. Conclusion: The individualized deep puncture at Tianshu (ST 25) is effective in the treatment of STC and achieves the satisfactory long-term efficacy. This therapy displays the good effective advantage and deserves to be promoted in clinical practice of acupuncture and moxibustion therapeutic program as compared with the first-tier line of medication, lactulose oral liquid, recommended at home and abroad, in terms of the evidence-based medicine.

- Sun JH, Guo H, Chen L, Wu XL, Li H, Pei LX, Peng YJ, Lu B. [Effect of Electroacupuncture at “Tianshu” (St 25) on Colonic Smooth Muscle Structure and Interstitial Cells of Cajal in Slow Transit Constipation Rats]. Acupuncture Research. 2011;36(3:171-5. [159634].

  Objective: To observe the effect of electroacupuncture (EA) of “Tianshu” (ST 25) on colonic smooth muscle structure and interstitial cells of Cajal (ICC) in slow transit constipation (STC) rats, so as to investigate its mechanism underlying improving STC. Methods: Wistar rats (n = 56) were randomly allocated to control (n = 20), model and EA groups (n = 18/ group). STC model was established by feeding the rats with forage containing compound Diphenoxylate. EA (0.8 - 1.3 mA, 2 Hz/15 Hz) was applied to bilateral “Tianshu” (ST 25) for 15 min, once daily for 14 days. The treatment was given beginning from the next day on after the rat's first black stool excretion was found. The colonic smooth muscle structure was observed under microscope after sectioning and HE staining. The immunoactivity (average optical density, OD) of intestinal immuno-reaction (IR) po-sitive ICC product was detected by immunohistochemistry. Results: (1) Microscopic observation displayed that after modeling, the rat's intestinal mucosa gland showed atrophy with reduction in the acinar number, being sparse in distribution; and the smooth muscle thickness was obviously thinner compared with the normal control group (P < 0.05). Whereas this situation of the colonic smooth muscle in the EA group was close to that of the normal control group. Compared with the model group, the thickness of the intestinal smooth muscle in the EA group was significantly bigger (P < 0.05). (2) Immunohistochemical results showed that the average OD values and number of IR-positive colonic ICC in the model group were obviously decreased in comparison with the normal control group (P < 0.05). Compared with the model group, the average OD values and the number of IR-positive colonic ICC in the EA group were upregulated considerably (P < 0.05). Conclusion: EA of bilateral “Tianshu”(ST 25) is able to improve STC-induced structural changes of the colonic smooth muscle, and upregulate expression of colonic ICC in STC rats, which may be responsible for its efficacy in improving STC.

- Sun Jian-Hua , Guo Hui, Pei Li-Xia , et al. [The Regulation of C-Kit and SCF Gene Expression In Colon of Rats with Slow Transit Constipation by Electroacupuncturing Tianshu Acupoint]. Journal of Nanjing University of Traditional Chinese Medicine. 2011;27(1):33. [178556].

  Objective To discuss the mechanism of slow transit constipation (STC) by electroacupuncturing Tianshu acupoint from gene level to provide experimental evidence for clinical treatment. Methods Slow transit constipation rats models were build by feeding diphen□xylate. Successful rat models were chosen and separated into electric acupunc ture group and model group randomly. Each group contained 6 rats. The rats of electric acupuncture group were treated by bilaterally electroacupuncturing Tianshu acupoints for 14 days. RT-PCR method was used to detect mRNA expression of c-kit and SCF in rats' colon in each group after treatment. Results The rate of c-kit and SCF gene expression of colon in model group was(0 37±0.03) t±mes and(0 24±0. 09) times as normal rats respectively, and in electric acupuncture group the number was (0.48±0.06) times and (0.38±0.07) times respectively.Compared with model group,c-kit and SCF gene expression in rats' colon in electrjc acupuncture group raised, whjch indjcates significant difference(P<(0.05) Conclusion The colon c-kit and SCF gene expression of SCT rats decreases and c-kit/SCF system is damaged. Elec troacupuncturing Tianshu acupoint has up-regulation function on colon c-kit and SCF gene expression, which may be one of the mechanisms of acupuncture treatment for s1ow transit constipation.

- Wang Lin, Peng Wei-Na, Guo Jun. [Improving Effects of Clinical Symptoms and Therapeutic Satisfaction on Slow Transit Constipation Patients Through Deep Electro Acupuncture at Tian Shu (St 25)]. Journal of Clinical Acupuncture and Moxibustion. 2013;29(2):1. [175239].

  Objective: To evaluate tile improving effects of clinical symptoms and therapeutic satisfaction on slow transit constipation patients through deep electro acupuncture at Tianshu (ST 25). The evaluation of safety was also included. Methods: A total of 128 siow transit constipation patients were involved in the study and

divided randomly into three groups with the ratio of 2 : 1: 1, they were deep needling technique group, medicine control group and shaliow needling technique control group. The evaluations were carried out before and after the four weeks'therapy, besides including the twelve weeks and six months long - term outcomes. The evaluated targets consisted of defecation related to clinical symptoms, therapeutic satisfaction of patients and safety of this technique. Results : The improving effects of clinical symptoms on slow transit constipation patients through deep electro acupuncture at Tianshu (ST 25) were consistent with lactulose oral liquid. Furthermore, it had obvious advantages in improving some clinical symptoms over the lactulose oral liquid. Tile long - term therapeutic satisfaction was also improved effectively while tile techniques safety was reliable. Conclusion: It is safe and effective for improving slow transit constipation patients' clinical symptoms and therapeutic satisfaction through deep electro acupuncture therapy at Tianshu (ST 25) , whose comprehensive effect is better than the international accepted first - line medicine lactulose oral liquid with which has Evidence - Based Medicine evidence. Therefore ,this acupuncture treatment programme deserves to be popularized and applied to the clinical therapy.

6.8. Physiologie digestive

- Yu Z, Xia YB, Lu MX, Lin J, Yu WJ, Xu B. [Influence of Electroacupuncture Stimulation of “Tianshu” (St 25), “Quchi” (Li 11) and “Shangjuxu” (St 37) and their Pairs on Gastric Motility in the Rat]. Acupuncture Research. 2013;38(1):40-7.[164652].

  Objective: To observe the effect of electroacupuncture (EA) stimulation of different acupoints or acupoint pairs on gastric motility so as to explore their modulation regularities under different conditions. Methods: SD rats were randomly divided into normal control, starvation (food-deprivation for 24 h), atropine (antagonist for M-receptor), acetylcholine (Ach, agonist for M-receptor), propranolol (antagonist for beta-receptor) and clenbuterol (agonist for beta 2-receptor) and paired-acupoint groups (30 rats/group). The intragastric pressure was measured via a pressure transducer connected to a balloon inserted in the stomach cavity. EA (2 Hz /15 Hz, 2 mA) was applied to the left “Tianshu” (ST 25),“Quchi” (LI 11) and “Shangjuxu” (ST 37) which were formed in pairs: ST 25-LI 11, ST 25-ST 37 and LI 11-ST 37 for 2 min following intravenous injection of atropine (0.1%, 0.8 mL/kg, 40 microL x min(-1) x kg(-1)), 0.1% acetylcholine (20 microL x min(-1) x kg(-1)), 0. 2% clenbuterol (80 microL x min(-1) x kg(-1)) and 0.4% propranolol (1 mL/kg,40 microL x min(-1) x kg(-1)) under food-deprivation conditions. Results: After intravenous injection of atropine and clenbuterol, the intragastric pressure were decreased significantly ($P < 0.05$), while after administration of Ach and propranolol, the intragastric pressure increased markedly ($P < 0.05$). Under normal and starvation conditions, and after intravenous administration of M-receptor antagonist (atropine) and agonist (Ach), beta-receptor antagonist (propranolol) and agonist (clenbuterol), EA stimulation of ST 25 produced an apparently inhibitory effects on gastric motility (80.00%, 86.67%, 76.67%, 86.67%, 73.33% and 86.67%, respectively) and intragatric pressure ($P < 0.05$) with the tendency being starvation > normal, acetylcholine > atropine and clenbuterol > propranolol. Whereas EA stimulation of LI 11 and ST 37 mainly produced an excitatory effect on gastric motility (60.00%, 56.67%, 93.33%, 40.00%, 53.33% and 50.00%, respectively for LI 11; 66.67%, 60.00%, 80.00%, 53.33%, 46.67% and 73.33%, respectively for ST 37). Following EA stimulation of the paired-acupoint groups, ST 25-ST 37 induced a predominately inhibitory effect on gastric motility (50.00%) and intragastric pressure, while LI 11-ST 37 stimulation had a principally excitatory effect on gastric motility (53.33%), and ST 25-LI 11 showed no apparent effect (50.00%). Conclusion: EA stimulation of ST 25 area at the abdomen produces a predominant inhibitory effect on gastric motility, while EA of LI 11 and ST 37 on the upper and lower limbs induces an excitatory effect on gastric movement, when applied in pairs, EA of ST 25-ST 37 suppresses the gastric activity, and LI 11-ST 37 promotes the gastric activity, suggesting a specificity of the effect of different acupoint stimulation.

- Jin Wancheng et al. Experimental Study on Effects of Ultrasound Acupuncture at Zusanli and Tianshu on Intestinal Function. Selections from Article Abstracts on Acupuncture and Moxibustion, Beijing. 1987;599. [25280].
- Wang HP, Gao XY, Liu K, Qin QG, Zhu B. [Effects of Acupuncture at “Tianshu” (St 25) on Electro-Activity and Mechanical Motility of Migrating Motor Complex during Jejunal Digestion Period in Rats with Detached Jejunum]. Chinese Acupuncture and Moxibustion. 2014;34(5):469-74. [174784]. Reproduit dans Wang HP, Qin QG, Liu K, Gao XY, Zhu B. [Effects of Acupuncture at

“Tianshu” (St 25) on Electrical and Mechanical Motor of Jejunum Smooth Muscles at Different Phases of the Interdigestive Migrating Motor Complex in Normal Rats]. Acupuncture Research. 2014;39(2):117-23. [172409].

> Objective: To observe the effects of acupuncture at “Tianshu” (ST 25) on electro-activity and mechanical motility at different phases of migrating motor complex (MMC) during jejunal digestion period in rats with detached jejunum, so as to explore the effect and mechanism of acupuncture on regulating intestinal movement. Methods: Sixteen adult SD rats were selected. Electrodes were implanted in the serous membrane of intestinal smooth muscle and high-sensitivity sensors of strain gauge were sutured on serosal surface, and then the rat was anesthetized and its jejunum was detached. Electro-acriviry and mechanical motility of jejunal smooth muscle were recorded simultaneously. Acupuncture was applied at “Tianshu” (ST 25) at MMC I , MMCII and MMC III, respectively, to observe its influence on electro-activity and mechanical motility. Results: At phase of MMC I, there was no obvious change of the fast wave before and after the acupuncture, while the frequency and amplitude of slow wave and mechanical motility were both significantly decreased compared with baseline ($P < 0.01$). At MMCII-III, the frequency and amplitude of fast wave, slow wave and motility were all significantly decreased compared with baseline ($P < 0.01$). Acupuncture at “Tianshu” (ST 25) had prohibited effects on electro-activity and mechanical motility of jejunal smooth muscle in rats with detached jejunum. Conclusion: Acupuncture at “Tianshu” (ST 25) has obvious prohibited effects on electro-activity and mechanical motility at MMC I , MMC II and MMC III time phases in rats with detached jejunum. The possible mechanism is that acupuncture at “Tianshu” (ST 25) could prohibit jejunum movement through reflex path of skin-sympathetic.

6.9. Colique néphrétique

- Chen Shu-Wen, Chen Ke-Zheng. [Observation on Therapeutic Effect of Electroacupuncture at Tianshu (St 25) on Renal Colic]. Chinese Acupuncture and Moxibustion. 2004;12:833. [136875].

> Objective To observe clinical therapeutic effect of electroacupuncture at Tianshu (ST 25), a specific analgesic point, on renal colic. Methods Ninety-seven cases of renal colic were semi-randomly divided into an electroacupuncture group (n=55) and a drug group (n =42). The electroacupuncture group were treated by electro-acupuncture at Tianshu (ST 25) and the drug group by intramuscular injection of 50 mg dolantin. Results The markedly effective rate and the total effective rate were 52.7% and 96.4% in the electroacupuncture group, and 28. 6% and 73. 8% in the drug group, respectively, with a very significant difference between the two groups in the markedly effective rate and the total effective rate ($P<0. 01$). Conclusion Electroacupuncture in relieving renal colic is superior to dolantin.

Traduction française : L’observation de l’efficacité du point tian shu (25E) dans le traitement de la colique néphrétique par l’électropuncture. Acupuncture Traditionnelle Chinoise. 2011;24:111-115. [161602].

> La puncture du point Tian Shu (25 E.) avec une longue aiguille et une stimulation par un stimulateur électrique donne de bons effets antalgiques. Selon l’observation clinique, son efficacité est supérieure à celle de la péthidine, notamment quand il s’agit de cas graves. Dans de nombreux cas, la douleur commence à s’atténuer dès l’insertion de l’aiguille dans le point et elle cesse au bout de 5 minutes d’électropuncture. Très peu de cas nécessitent jusqu’à 30 minutes. Les effets antalgiques du point Tian Shu (25 E.) en électropuncture sont donc assez rapides.

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Last update: **03 Feb 2022 14:35**