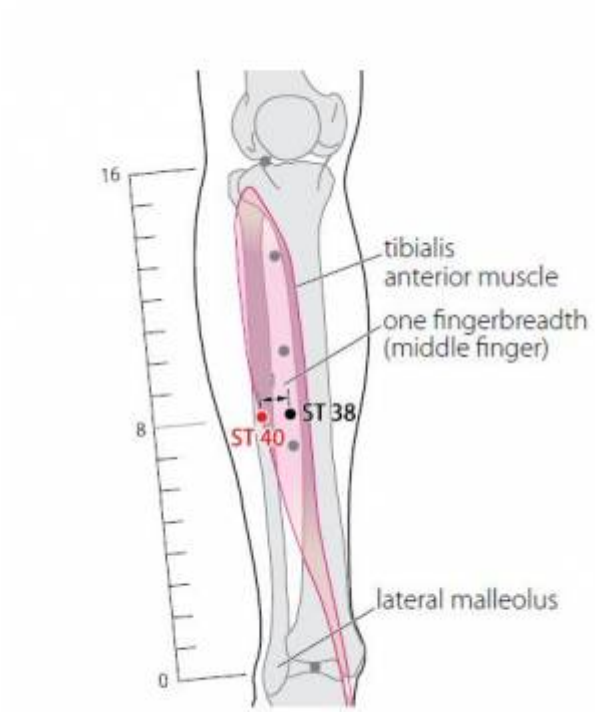
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# 40E Fenglong 丰隆［豐隆］

prononciation fenglong.mp3

*articles connexes*: 39E – 41E - Méridien -




WHO 2009.

## 1. Dénomination

### 1.1. Traduction

| | | |
|---|---|---|
| **丰隆**<br>**fēng lóng** | Abondance et prospérité (Chamfrault 1954, Soulié de Morant 1957, Pan 1993)<br>Contenir l'excès (Nguyen Van Nghi 1971)<br>Prospérité abondante (Lade 1994)<br>Voûte d'opulence (Dieu du Tonnerre) (Laurent 2000)<br>Abondante récolte (Despeux 2012) | Bountiful Bulge (Ellis 1989)<br>Rich and Prosperous (Li Ding 1992) |

- Zhou Mei-sheng 1984 : *feng* rich; abundant. *long* projecting; prosperous.

豐 *feng* forme simplifiée : 丰 (Ricci 1592) : récolte abondante, luxuriant, fertile, abondant, plein (Guillaume 1995)
Les rameaux symboles de prospérité dans un vase *dou*. La graphie archaïque représente des récipients pleins de grains surmontés de rameaux ou de gerbes de céréales, (le vase avec rameaux était d'emploi rituel). Le sens s'étend à : récolte abondante ; luxuriant, fertile, plantureux, opulent ; abondant, copieux, grand, considérable ; plein, replet ; 55° hexagramme : "Plénitude de l'abondance, moment où le développement atteint son apogée avant de commencer à décliner" (Laurent 2000)

隆 *long* (Ricci 3307) : faire saillie ; protubérant, grand, grandiose, généreux, florissant (Guillaume

1995)
Ce que l'autorité (homme soumis à un supérieur = le Ciel) fait descendre *jiang*, ce que la Terre engendre : tous les biens. Le caractère classique propose un amalgame graphique entre l'autorité et *sheng* engendrer, d'où : abondant, fertile ; nombreux, florissant. grand, éminent, grandiose. Certains commentaires privilégient la notion de Ciel ce qui fait évoluer le sens vers : convexe ; haut, en forme de voûte (Laurent 2000)

## 1.2. Origine

- Jia yi jing, chapitre « *Jing mai* » (Guillaume 1995).

## 1.3. Explication du nom

- Zhou Mei-sheng 1984 : *Fenglong* is another name for thunder. The point of *Fenglong* belongs to the meridian of stomach, the stomach belongs to earth, the ground. When the ground energy develops and gets prosperous, thunder-happens.
- Ellis 1989 : ST 40 is located at the belly of the calf muscle, the Bountiful Bulge. As the connecting-*luo* point of the stomach channel, ST 40 is also endowed with an abundance of earth *qi*. These elements give the name Bountiful Bulge a double meaning where the word bountiful can refer to both the abundance of earth *qi* at the connecting-*luo* point and the largeness of the bulge of muscle. Thus the name at once reminds us where the point is located and that it is the connecting-*luo* point of the channel. This point name is also the name of a cloud spirit and an expression describing the sound of thunder.
- Li Ding 1992 : “*Feng*” 丰 means great and rich. “*Long*” 隆 means prosperous. The Stomach Meridian of Foot-Yangming has the most abundant *qi*, blood, and food energy. Also there are abundant muscles around the point area. Hence the name *Fenglong* (Rich and Prosperous).
- Pan 1993 : ce nom peut s'expliquer de deux façons : 1) Le point *Fenglong* est situé à 1 distance en arrière du point *Tiaokou* (38E), dans un grand creux, entre l'extenseur commun des orteils et le jambier antérieur. Ces muscles donnent une impression d'« Abondance et de prospérité ». 2) Le *Qi* du méridien de l'Estomac est abondant à ce niveau. C'est ici qu'il se déverse dans le *Luo*. Le nom *Fenglong* viendrait alors de l'abondance et de la prospérité du *Qi* à cet endroit.
- Lade 1994 : Le nom évoque que le *Qi* du méridien est, au point de Communication, à la fois abondant et plein de vitalité. *Feng long* signifie aussi “tonnerre” (qui était considéré par les anciens Chinois comme un signe de l'abondance de l'énergie de la terre) et évoque la nature du *Qi* du méridien de l'Estomac qui, quand il est plein, déborde et est orienté vers le méridien de la Rate à partir de ce point.
- Laurent 2000 : *fenglong* peut se traduire par “voûte d'opulence”, le point traite plutôt les plénitudes ou les états pathologiques liés aux excès alimentaires et aux nourritures trop riches, il est situé dans la partie du jambier antérieur qui relie le corps du muscle à son extrémité inférieure plus effilée, cette partie a précisément la forme d'une voûte. *Fenglong* est aussi le dieu du tonnerre, une expression chinoise dit “quand l'énergie de la terre croît et fructifie le tonnerre apparaît” en médecine chinoise ce point est utilisé (entre autres) lorsque la terre prospère trop (formation de *tan*).

## 1.4. Noms secondaires

### 1.5. Autres Romanisations et langues asiatiques

- fong long (fra)
- feng lung (eng)
- Phong long (viet)
- pung nyung (cor)
- hō ryū (jap)
- Feng-lung (Li Su Huai 1976)

### 1.6. Code alphanumérique

- 40E, E40, 40 Est (Estomac)
- ST 40 (Stomach)
- VI-C37 (Li Su Huai 1976)

## 2. Localisation

### 2.1. Textes modernes

- Chamfrault 1954 : Ce point est situé à huit distances au-dessus de la malléole externe, dans un creux de la partie externe de la jambe, au même niveau que le point Ku Sing Chang Lien 37E, un peu en dehors de lui.
- Soulié de Morant 1957 : Jambe face ant. latérale (ext.). Cinq travers de doigts au-dessus d'os de cheville (malléole ext.). Dans l'angle inférieur de deux muscles qui se rétrécissent (reb. post. de Jambier ant. qui longe le tibia; reb. ant. de l'Extenseur corn. le long du Péroné). Dans un creux.
- Nguyen Van Nghi 1971 : A 8 distances au-dessus de la malléole externe, dans un creux de la partie externe de la jambe, légèrement au-dessus de la ligne horizontale passant par Ku Sing Chang Lien (37E) un peu en dehors de celui-ci.
- Li Su Huai 1976 : 2 fingers-width lateral from the anterior crest of the tibia, and midway between the lower edge of the patella and the highest point of the lateral malleolus, Bilateral.
- Roustan 1979 : à huit distances au-dessus du bord antérieur de la malléole externe et une distance en dehors de *Tiao Kou* 38E.
- Zhou Mei-sheng 1984 : The point is on the antero—lateral part of the shank where the muscles are well developed.
- Zhang Rui-Fu 1992 : il est situé huit pouces en dessous de l'angle inférieur de la rotule, deux travers de doigt en dehors du bord tibial antérieur et un travers de doigt en dehors du point ES 38 Tiaokou.
- Deng 1993 : sur la face antéro-externe de la jambe, à 8 *cun* au-dessus de la pointe de la malléole externe, à l'extérieur de *Tiaokou* (38E), et à deux travers de doigt (majeur) du bord avant du tibia.
- Guillaume 1995 : À 8 distances au-dessus de la malléole latérale, à un travers de doigt en dehors du point *Tiao kou*- 38E.
- Laurent 2000 : sur la face antéro-externe de la jambe, à 8 *cun* au-dessous de *dubi* 35E, à 1 *cun* en dehors de *tiaokou* 38E.
- WHO 2009: On the anterolateral aspect of the leg, lateral border of the tibialis anterior muscle, 8 B-*cun* superior to the prominence of the lateral malleolus. Note: ST 40 is one fingerbreadth (middle finger) lateral to ST38.

**Items de localisation**

- Malléole externe
- Bord tibial antérieur
- 35E, 38E

## 2.2. Textes classiques

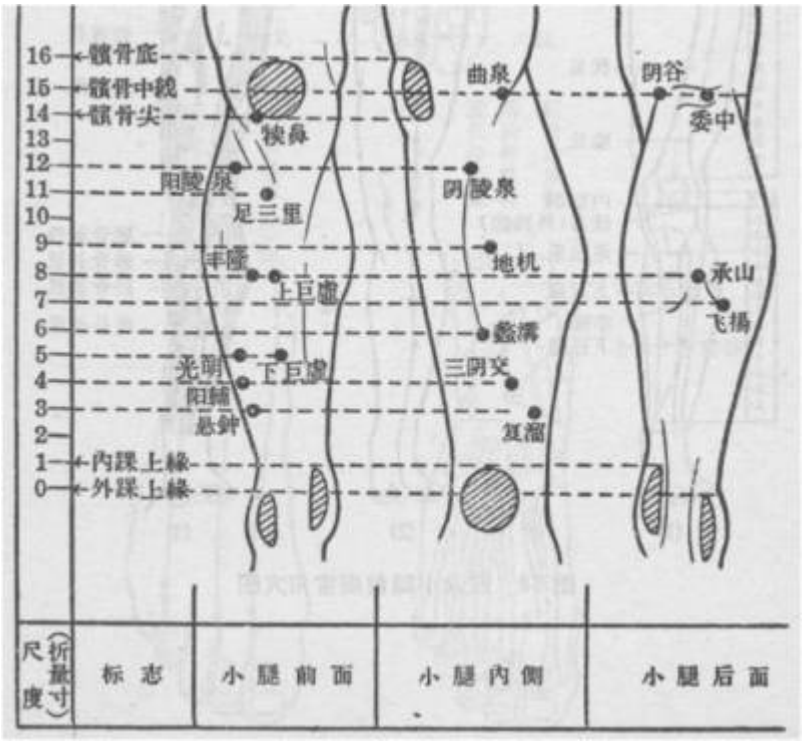
- Ling Shu : A 8 *cun* de la malléole (Deng 1993).
- Jia Yi Jing : A 8 *cun* au-dessus de la malléole externe, dans la dépression qui se forme à côté du tibia (Deng 1993).
- Jin Jian : A la diagonale de *Xiajuxu* (39E), au-dessus et en arrière de celui-ci, à 8 *cun* au-dessus de la malléole externe, dans la dépression qui se forme à côté du tibia (Deng 1993).
- Deng 1993 : Les ouvrages de médecine s'accordent sur la localisation de ce point, c'est-à-dire qu'ils le situent à 8 *cun* au-dessus de la malléole externe et dans la dépression qui se forme à côté du tibia. Toutefois, ce point est facile à confondre avec *Tiaokou* (38E). *Fenglong* (40E) est un point *Luo*, un peu à l'extérieur, à deux travers de doigts de la crête du tibia, directement à 8 *cun* au-dessus de la*Italique* malléole externe, tandis que *Tiaokou* (38E) se situe sur la ligne qui relie *Zusanli* (36E) et *Xiajuxu* (39E), ce qui est conforme à la définition donnée dans Jin Jian.

## 2.3. Rapports et coupes anatomiques

- Roustan 1979 : Nerf peroneus superficialis, ramus perforans de l'artère fibularis (péronière antérieure).
- Guillaume 1995 : Artère et veine tibiales antérieures. Nerf péronier superficiel, nerf péronier profond.

## 2.4. Rapports ponctuels

- Deng 1993 : Peau—tissu sous-cutané—muscle long extenseur des orteils—muscle long extenseur du gros orteil—membrane interosseuse de la jambe—muscle jambier postérieur. Dans la couche superficielle, on trouve le nerf accessoire du saphène externe. Dans la couche profonde, on trouve les branches ou tributaires de l'artère et de la veine tibiales antérieures, et les branches du nerf péronier profond.




# 3. Classes et fonctions

## 3.1. Classe ponctuelle

- Point Lo du méridien d'où part un vaisseau vers le point Iunn du méridien de la rate (Taé Po 3Rte). (Chamfrault 1954, Nguyen Van Nghi 1971)
- Point-de-passage entre estomac et rate-pancréas (Soulié de Morant 1957)
- Point de raccord du méridien, il communique avec son méridien couplé : le méridien de la rate. (Zhang Rui-Fu 1992)
- Point *Luo* de *Zuyangming* (Roustan 1979).

## 3.2. Classe thérapeutique

| | | |
|---|---|---|
| **action sur les substrats (sang, énergie, glaire)** | | |
| dissout les glaires | dissout les glaires<br>élimine les glaires et l'humidité<br>élimination du Tan et de l'humidité (en dispersion + moxas)<br>dissout le Tan | Tai yi shen zhen (Guillaume 1995)<br>Roustan 1979<br>Zhang Rui-Fu 1992<br>Laurent 2000 |
| **action sur les Energies Perverses** | | |
| dissipe le vent | dissipe le vent | Guillaume 1995 |
| élimine la chaleur et l'anxiété | élimine la chaleur et l'anxiété<br>dispersion de la chaleur | Tai yi shen zhen (Guillaume 1995)<br>Zhang Rui-Fu 1992 |
| **action sur les circulations (méridien, luo)** | | |

| | | |
|---|---|---|
| vivifie les Luo | renforcement tendinomusculaire (en tonification)<br>vivifie les Luo<br>traite les symptomes de la branche Luo | Zhang Rui-Fu 1992<br>Guillaume 1995<br>Laurent 2000 |
| stimulation circulatoire | stimulation circulatoire en dispersion + moxas | Zhang Rui-Fu 1992 |
| suppression de la stase et du facteur pathogène | suppression de la stase et du facteur pathogène en dispersion + moxas | Zhang Rui-Fu 1992 |
| induit un mouvement d'abaissement | induit un mouvement d'abaissement | Tai yi shen zhen (Guillaume 1995) |
| **action sur les organes** | | |
| action eupeptique et carminative | action eupeptique et carminative<br>tonification de l'estomac et de la rate (en tonification)<br>harmonise l'estomac | Zhang Rui-Fu 1992<br>Zhang Rui-Fu 1992<br>Guillaume 1995 |
| régulation de la rate, du Qi et du sang | régulation de la rate, du Qi et du sang (en tonification)<br>active le qi de la Rate et de l'Estomac | Zhang Rui-Fu 1992<br>Laurent 2000 |
| **action sur les fonctions physiologiques** | | |
| calme la dyspnée | calme la dyspnée<br>action anti-dyspnéique | Tai yi shen zhen (Guillaume 1995)<br>Zhang Rui-Fu 1992 |
| apaise l'esprit | apaise l'esprit<br>calme l'esprit<br>clarifie le Shen | Tai yi shen zhen (Guillaume 1995)<br>Roustan 1979,<br>Laurent 2000 |
| action anxiolytique et sédative | action anxiolytique et sédative | Zhang Rui-Fu 1992 |
| stabilise la volonté | stabilise la volonté | Tai yi shen zhen (Guillaume 1995) |

- Xie Jie-Ping, Li Xiao-Hong, Li Wei. [Inquire into the Function of Resolving Phlegm and the Mechanism on Fenglong (St 40)]. Journal of Clinical Acupuncture and Moxibustion. 2006;22(1):1. [183030].

  > Discuss the function and the origin of the Fenglong (ST 40) resolving phlegm by researching the documents. As the time, studied the mechanisms of the Fenglong (ST 40) resolving phlegm on the relation of the lung and the stomach, immunity, lipid metabolism and braim-gut peptides

- Tai yi shen zhen (Guillaume 1995) : *Feng long* dissout les glaires, calme la dyspnée, apaise l'esprit, stabilise la volonté, élimine la chaleur et l'anxiété. Ce point a la propriété d'induire un mouvement d'abaissement.
- Roustan 1979 : élimine les glaires et l'humidité, calme l'esprit.
- Zhang Rui-Fu 1992 : *En dispersion* : élimination du Tan et de l'humidité, dispersion de la chaleur, action anti-dyspnéique, action eupeptique et carminative, action anxiolytique et sédative, régulation de la rate, du Qi et du sang. *En dispersion + moxas* : élimination du Tan et de l'humidité par caléfaction, caléfaction de l'estomac et régulation du système digestif, stimulation circulatoire, suppression de la stase et du facteur pathogène. *En tonification* : tonification de l'estomac et de la rate, renforcement tendinomusculaire.
- Guillaume 1995 : *Feng long* élimine les glaires, harmonise l'Estomac, calme l'esprit, dissipe le vent, vivifie les *Luo*.
- Laurent 2000 : dissout le *tan*, active le *qi* de la rate et de l'Estomac, clarifie le *shen*. Traite les symptômes de la branche *luo* : plénitude : folie, démence, épilepsie, vide : membres décharnés,

contre-sens : angine, aphonie.

# 4. Techniques de stimulation

| Acupuncture | Moxibustion | Source |
|---|---|---|
| Selon Tong ren, puncturer à 0,3 distance | Selon Tong ren appliquer 3 cônes de moxa, selon Ming xia, appliquer 7 cônes de moxa | Zhen jiu ju ying (Guillaume 1995) |
| perpendicularly 0.5-1.0 in. | moxa stick 5-20 mn.,3-15 moxa cones. | Li Su Huai 1976 |
| perpendiculaire 0.5-1.2 pouce | | Zhang Rui-Fu 1992 |
| Puncture entre 1 et 1,5 distance de profondeur | Cautérisation avec 5 à 7 cônes de moxa, moxibustion pendant 5 à 15 minutes | Guillaume 1995 |
| Piquer perpendiculairement vers l'intérieur, à 1,5-3 distances | Cautériser 5-7 fois, chauffer 5-10 minutes | Roustan 1979 |

**Sensation de puncture**

- Roustan 1979 : sensation de gonflement qui irradie jusqu'à la racine de la cuisse ou à la malléole externe.
- Zhang Rui-Fu 1992 : si l'on effectue une forte stimulation le patient ressent l'effet acupunctural irradiant jusqu'à la face dorsale du pied. Si l'on incline légèrement l'aiguille vers le haut, l'effet acupunctural irradie jusqu'à l'aine, l'abdomen et parfois jusqu'à la tête suivant le trajet du méridien.

**Sécurité**

# 5. Indications

| | | |
|---|---|---|
| **Classe d'usage** | ★★ | point majeur |

## 5.1. Littérature moderne

- Li Su Huai 1976 : Cough, excessive sputum, headache, vertigo, abdominal pain, lower Limb pain, epilepsy, histeria, constipation, retention of urine.
- Roustan 1979 : toux, hypersécrétion, céphalée, vertiges, polynévrite vitaminoprive, aménorrhée, hémorragie utérine.
- Zhang Rui-Fu 1992 : *Pathologies* : asthme, bronchite aiguë et chronique, pneumopathie, pharyngite aiguë ou chronique, hypertension artérielle, angine de poitrine, dyspepsie, épilepsie, troubles psychiques, hémiplégie, paraplégie. *Symptomatologie* : dyspnée, toux avec mucosités abondantes, pharynx oedémateux et douloureux, algie et sensation d'oppression thoracique, vertige et céphalée, nausée et vomissements, constipation, crise d'agitation, délire, amyotrophie du membre inférieur, oedème et algie du membre inférieur, déficit moteur de la jambe.
- Lade 1994 :
    - Régularise l'Estomac et les Intestins, clarifie le Feu et la Chaleur de l'Estomac, draine les facteurs pathogènes du Poumon, transforme l'Humidité, la Chaleur-Humidité, la Chaleur de l'Eté-Humidité, les Glaires, les Glaires-Froid, les Glaires-Humidité et les Glaires-Chaleur,

et assèche l'Humidité et le Froid-Humidité. Indications : épilepsie, bronchite, abcès du poumon, asthme, coqueluche ou pneumonie avec mucosités abondantes, obstruction douloureuse de type Humidité prédominante, syndrome ménopausique, éblouissements et vertiges dus aux Glaires, vomissements, nausées de la grossesse, douleur de la poitrine avec difficulté à respirer, toux, distension et douleur épigastriques, selles molles ou diarrhée avec écoulement muqueux, défécation douloureuse ou difficile, maladie *Qi* de la jambe.
    - Calme l'Esprit et transforme les Glaires du Cœur. Indications : dépression et manie par Glaires, discours incohérent, douleur de poitrine et palpitations avec anxiété et insomnie.
    - Disperse le Vent et les Glaires-Vent. Indications : obstruction douloureuse de la gorge et asthénie des membres, névralgie intercostale, paralysie faciale avec crachats abondants, paralysie des membres inférieurs par ictus, éblouissements, et céphalées.
- Effet local : douleur, paralysie, gonflement ou atrophie musculaire du membre inférieur.
    - Guillaume 1995 : Céphalée, vertiges, toux avec glaires abondantes, dyspnée, enflure et douleur de la gorge, constipation, folie-*dian kuang*, convulsions, douleur thoraco-abdominale, atrophie et *Bi* des membres inférieurs.

## 5.2. Littérature ancienne

- Ling shu : Chapitre « *Jing mai* » : « *Bi* de la gorge avec aphonie soudaine », « Folie-*dian kuang* », « Impotence fonctionnelle des membres inférieurs avec atrophie de la jambe ».
- Jia yi jing : « Céphalée de type *Jue*, enflure du visage, inquiétude, folie avec hallucinations (voit des revenants), rires incontrôlés » (Guillaume 1995).
- Qian jin yao fang : « Corps humide », « *Jue ni*, modification brutale de la coloration des membres inférieurs avec douleur soudaine en coup de poignard, douleur abdominale à type de coupure, défécation difficile, inquiétude-*xin fan*, folie avec hallucinations (voit des revenants), rires sans cause, enflure brutale des quatre membres », « Douleur thoracique en coup de poignard », « Défécation et miction difficiles, impossibilité de s'alimenter, céphalée, froid et chaleur, transpiration sans crainte du froid » (Guillaume 1995).
- Ishimpo : Perturbation du *Qi* du froid ; froid des soudain ; douleur de la poitrine comme si elle était transpercée ; douleur tranchante des intestins ; impossibilité de manger ; constipation et dysurie ; enflure des quatre membres (Guillaume 1995).
- Sheng hui fang : « Impotence fonctionnelle des quatre membres, adynamie, myalgie ou algie des jambes et des genoux avec difficulté de flexion-extension » (Guillaume 1995).
- Yu long jing - Yu long ge : « Toux avec abondance de glaires » (Guillaume 1995).
- Tai yi ge : il traite le Coup de Froid-*shang han* et les vomissements de parasites » (Guillaume 1995).
- Xi hong fu : « Il traite spécifiquement la douleur du Cœur chez la femme » (Guillaume 1995).
- Zhen jiu ju ying : *Jue ni*, miction et défécation difficiles, lassitude, myalgies des jambes et des genoux avec difficulté de flexion-extension, douleur thoracique en coup de poignard, douleur abdominale à type de coupure. Glaires de type vent avec céphalée, reflux du vent avec enflure des quatre membres, froid-*qing* des membres inférieurs avec le corps froid et humide, *Bi* de la gorge avec impossibilité de parler, le sujet veut grimper en hauteur pour chanter, se déshabiller et courir, il voit des revenants et rit sans raison. Reflux du *Qi* avec *Bi* de la gorge et aphonie soudaine ; en cas de plénitude, c'est la folie-*dian kuang*, il faut disperser ; en cas de vide, il y a impotence fonctionnelle des membres inférieurs avec atrophie des jambes, il faut tonifier » (Guillaume 1995).
- Yi xue ru men : « Céphalée, enflure du visage, *Bi* de la gorge, douleur tranchante du thorax et de l'abdomen, enflure des quatre membres, fièvre-froid et transpiration, difficulté de défécation et de miction, accès de folie-*kuang* avec envie de chanter et hallucinations visuelles (voit des

revenants), *Jue ni* avec les mains qui deviennent brutalement violacées, douleur du Cœur à type de piqûre » (Guillaume 1995).

- Da cheng : Reprend intégralement la citation du Zhen jiu ju ying, à ceci près que ce dernier parle de froid-*qing* (Ricci 1000) du genou, alors que le Da cheng parle de marbrure-*qing* (Ricci 1006) du genou (Guillaume 1995).
- Lei jing tu yi : Céphalée, enflure du visage, *Bi* de la gorge avec impossibilité de parler, reflux du vent-*feng ni* avec folie-*dian kuang*, le sujet voit des revenants (hallucinations visuelles) et rit sans raison, *Jue ni*, douleur thoracique pongitive, difficulté de miction et de défécation, paresse (adynamie), douleur du genou et de la jambe avec difficulté à la fléchir et l'étendre, douleur abdominale et enflure des membres, sensation de froid dans la jambe due au froid-humidité » (Guillaume 1995).
- Sheng ji zhong lu : « Enflure des quatre membres avec corps humide » (Guillaume 1995).
- Tai yi shen zhen : « Dyspnée due à l'accumulation de glaires de type vent, asthme, enflure du visage et céphalée, douleur de la gorge avec impossibilité de parler, reflux du vent avec atteinte directe par les pervers et accès de folie-*dian kuang*, propos incohérents, hallucinations (voit des revenants), accès de rire sans raison, syncope-*jue ni*, douleur thoracique pongitive, difficulté de miction et de défécation, lassitude et douleur du genou et de la jambe, adynamie et absence de force » (Guillaume 1995).

## 5.3. Associations

| **Indication** | **Association** | **Source** |
|---|---|---|
| Toux et hypersécrétion | **40E** + 13V | Yu Long Fu (Roustan 1979, Guillaume 1995) |
| Toux | **40E** + 13V | Zhen jiu ju ying-Yu long lu (Guillaume 1995) |
| Algies thoraciques | **40E** + 40VB | Zhi Shen Jing (Roustan 1979, Guillaume 1995) |
| Vertige avec insomnie | **40E** + *Anmien* (PN 5) + 7C | Roustan 1979 |
| Vertige causé par le Tan | **40E** + 20VG + 20V | Zhang Rui-Fu 1992 |
| *Shi lao* (surmenage cadavérique) | **40E** + 1Rn + 4VC | Yu long fu (Guillaume 1995) |
| Céphalées insupportables | **40E** + 18VG | Bai zheng fu (Guillaume 1995) |
| Céphalée Feu du Foie | **40E** + 20VB + 20VG + 3F + 44E en dispersion | Zhang Rui-Fu 1992 |
| Epilepsie | **40E** + 7C + 3F en dispersion | Zhang Rui-Fu 1992 |
| Crise d'agitation | **40E** + 7C + 12VC + 26VG + 4GI + 3F en dispersion | Zhang Rui-Fu 1992 |
| Gastralgie | **40E** + 12VC | Zhang Rui-Fu 1992 |
| Douleur du Coeur (épigastre) avec vomissement | **40E** + 13VC | Tai yi ge (Guillaume 1995) |
| Nausée et Vomissements | **40E** + 6MC en dispersion | Zhang Rui-Fu 1992 |
| Constipation | **40E** + 5TR en dispersion | Zhang Rui-Fu 1992 |
| Reflux du vent avec enflure des quatre membres | **40E** + 7Rn | Zi sheng jing (Guillaume 1995) |
| Impotence fonctionnelle des quatre membres | **40E** + 20V | Zi sheng jing (Guillaume 1995) |
| Pathologies du tan et de l'humidité | | Zhang Rui-Fu 1992 |

### 5.4. Revues des indications

- He Youxin. [Preliminary Approach to the Clinical Therapeutic Effect of Fenglong Point]. Journal of Traditional Chinese Medicine. 1986;27(12):48-52. [30651].
- Auteroche et al. E40 - Fenglong : Plantureuse Protuberance. Méridiens. 1996;107:143-9. [55283].

  Etude du point Fenglong (E40) du Méridien Zu Yang Ming (Estomac), comportant la localisation du point, ses caractéristiques, ses fonctions et indications thérapeutiques, des commentaires sur ses caractéristiques et de nombreux exemples d'associations du point en rapport avec ses spécificités et ses indications thérapeutiques.

- Yu Guoqiao. Zur Klinischen Anwendung Des Foramens Abundantia, S40 (Fenglong). Chinesische Medizin. 2000;15(3):85-9. [86911]. [The Clinical Use of Foramen Abundantia, ST 40 (Fenglong)].

  The article illustrates the broad clinical applicability of the acupuncture point abundantia, ST 40 (Fenglong) by describing therapy of 4 patients: in a woman suffering from editorial vertigo pituita was blocking the lienal and stomach orbs, thus the clear Yang could not flow upward and the Yin could not sink downward, which disturbed the clearness of the orifices; in a patient with impotenzia coeundi, downflowing calor humidus, generated a laxness of the penis (“muscles and tendons of innate susceptibility”, zongjin, nervus genuinum); motorial aphasia apoplexia (percussio venti) was seen as pituita venti disturbing the upper body and blocking the orifices; finally, senile constipation was treated which was caused by algor depletionis in the lienal and stomach orbs disturbing` the transforming. and distributing -functions of these orbs, as well as by blockades of the Qi dynamic. Although these diseases were very different from each other, they were nevertheless cured by using the acupoint ST 40 only. The author emphasises the importance of the correct analysis of the manifestation type determination (bianzbeng) and the choice of appropriate manual techniques, needle types and moxa methods. In addition, the therapies were accompanied by dietetic advice.

- Chen S. Clinical Application of the Acupoint Fenglong (ST 40). Journal of Traditional Chinese Medicine. 2007;27(1):7-8. [145365].

## Études cliniques et expérimentales

### 6.1. Rétention de liquides

- Hu Jinsheng. Mise en oeuvre des points shuifen (9RM), yinjiao (7RM), yinlingquan (9RT) et fenglong (40E) dans le traitement du syndrome de retention interne de liquides. Journal de Medecine Traditionelle Chinoise. 2005;1(2):51. [126208].

### 6.2. Hypertension

- Chen Daozhi et al. Observation on Therapeutic and Hemodynamic Effects Induced by Needling Points Quchi and Fenglong in Patients with Essential Hypertension. Second National Symposium on Acupuncture and Moxibustion, Beijing. 1984;:14. [9835].

  74 patients présentant une HTA ont été traités soit par la médecine occidentale, soit par acupuncture seule (35 cas). Les points utilisés sont 11GI et 40E. Le nombre de séances est de 2 à 3 par semaine pendant 8 semaines. Les résultats sont positifs chez 78,9 % des patients avec des mesures de constantes physiologiques au niveau cardiaque et circulatoire. Une approche du mode d'action est donnée par le fait que la majorité des patients hypertendus présentent une vascoconstriction périphérique objectivée par différentes mesures.

## 6.3. Dyslipidémies

- Li X, Zhang Y, Yan W, Kang J, Kang Y, Lie M. Isolation of Genes Involved in the Preventive Effect of Electroacupuncture at Fenglong Acupoint (St40) on Hypercholesterolemia Mice by Suppression Subtractive Hybridization (SSH).

  Acupunct Electrother Res. 2006;31(3-4):233-46. [146362]. It is known that electro-acupuncture (EA) has neuroprotective effects on cerebral ischemia, however, whether insulin-like growth factor-1 (IGF-1) as a potent nerve regeneration agent involved is unknown\. Therefore, the aim of the present study was to investigate the neuroprotective effects of EA against cerebral ischemia whether influence IGF-1 expression following the middle cerebral artery occlusion (MCAO) in monkeys\. The results indicated that after occlusion of MCA, the IGF-1mRNA and protein expression was down-regulated\. EA, given 15 minutes after occlusion of MCA and lasted for 1 h between the acupuncture points Baihui Point (GV\. 20) and Renzhong Point (GV\. 26) with a dense-sparse waveforms, which can be transformed into each other when dense or sparse wave is terminated, attenuated brain edema, decreased the infarct area, up-regulated IGF-1mRNA and protein expression\. These results implied that EA is effective to extenuate cerebral ischemic injuries and up-regulating the endogenous IGF-1 expression following MCA occlusion in monkeys, which might be an important mechanism of neuroprotective effects of EA against cerebral ischemia.

- Li M, Zhang Y. Modulation of Gene Expression in Cholesterol-Lowering Effect of Electroacupuncture at Fenglong Acupoint (St40): A cDNA Microarray Study. Int J Mol Med. 2007;19(4):617-29.[144469]

  The aim of this study was to demonstrate the cholesterol-lowering effect of electroacupuncture (EA) at the acupoint of Fenglong (ST40) in mice and to investigate its molecular mechanism by using genome-wide gene expression profile analysis. Mice with hypercholesterolemia induced by a high-cholesterol diet were randomly divided into EA at ST40 group (EG), EA at non-acupoint group (ENG), and simvastatin group (DG). A lipid profile of both the plasma and liver indicated that EA at ST40 had the same hypocholesterolemic effect as that of simvastatin, while EA at non-acupoint failed to produce the same effect. The global gene expression profile showed that EA at ST40 not only regulated the expression of genes which were directly involved in the cholesterol metabolism in the liver, but also significantly affected the expression of genes involved in signal transduction, transcription regulation, cell cycle, cell adhesion, immunity and stress. The gene expression pattern was further verified by real-time RT-PCR. The mechanism by which EA at ST40 regulated liver cholesterol metabolism is discussed. We conclude that the hypocholesterolemic effect is specific to EA at ST40 and not due to general electrical stimulation of muscles. The comprehensive gene expression profile analysis appears particularly useful in the search for EA-induced changes in cholesterol regulation.

- Xie JP, Liu GL, Li W, Gu Q, Qiao JL, Zhang H, Hu H, Gao AA, Li XH, Wang CY. [Study on Optimization Parameters of Electroacupuncture at Fenglong (ST 40) for Adjusting Blood Lipids]. Chinese Acupuncture and Moxibustion. 2007;27(1):39. [144607].

  OBJECTIVE: To study the effects of different parameters (frequency, intensity, needle-retained time and treatment interval) of electroacupuncture at Fenglong (ST 40) for adjusting blood lipids, so as to find out the optimization parameter. METHODS: Fifty-four cases meeting the criteria for hyperlipoidemia were randomly divided into 27 groups with orthogonal design L27 (3(13) ). According to the orthogonal design program they were treated with electroacupuncture at Fenglong (ST 40). Ten sessions constituted one course with a one week's interval between two course. The treatment was given for 2 courses. RESULTS: (1) The parameters of EA at Fenglong (ST 40) for regulating blood lipids in primary and secondary orders are: frequency, needle-retained time, interval of treatment, intensity. (2) The parameters of EA at Fenglong (ST 40) for various programs in regulating various blood lipids are: for TG, frequency AM 50 Hz, needle-retained time 20 ain, intensity 1 mA, twice each week; for TC, frequency AM 100 Hz, needle-retained time 30 min, intensity 1 mA, once every other day; for LDL-C, frequency Am 100 Hz, needle-retained time 30 min, intensity tolerable and comfortable, once every other day.

- Xie Jie-Ping , Li Wei , Hong Yon , Jia Jun-Jun , Li Xiao-Hong, Chen XU , Gao YON. Effects of Electroacupuncture at Fenglong (ST 40) on SOD and MDA in Different Organs of the Hyperlipemia Rat. Chinese Acupuncture and Moxibustion. 2008;28(4):293. [149065].

Objective To probe into the target organ of Fenglong (ST 40) and the mechanism in resolving phlegm. Methods Thirty SD rats were randomly divided into 3 groups, a blank control group, a model group and a Fenglong group, 10 rats in each group. The hyperlipemia rat model was prepared by feeding high fat forage. The blank control group were fed by basic forage each day, and other 2 groups were fed with high fat forage each day. After the rats were fed for 2 weeks, EA was given at “Fenglong” (ST 40) in the rats of the Fenglong group, twice each week, for 10 times. At the end of EA treatment, SOD activities and MDA contents in the spleen, lung, liver and pancreas were detected. Results Acupuncture at “Fenglong” (ST 40) significantly increased SOD activities in the spleen and lung, decreased MDA content in the lung, and had a tendency to decrease SOD activity and to increase MDA content in the liver, while it did not significantly influence SOD activity and MDA content in the pancreas. Conclusion The target organs of “Fenglong” (ST 40) regulating SOD activity and MDA content are spleen, lung and liver, particularly, spleen and lung, with no relation with pancreas. It is indicated that the resolving phlegm function of “Fenglong” (ST 40) is related with promoting metabolism of free radiations in special organs

- Zhou L, Zhang HX, Liu LG, Wan WJ. [Effect of Electro-Acupuncture at Fenglong (GV 16) on Nitric Oxide and Endothelin in Rats with Hyperlipidemia.]. Zhong Xi Yi Jie He Xue Bao. 2008;6(1):89-92. [147480].

  Objective: To investigate the effect of electro-acupuncture (EA) at Fenglong (GV 16) on body weight, blood lipids, nitric oxide (NO) and endothelin (ET) in rats with hyperlipidemia (HLP).Methods: Eighty Wistar rats were randomly divided into normal control group (fed normal diet), untreated group (fed a high-fat diet), EA-treated group (fed a high-fat diet plus EA therapy) and pravastatin-treated group (fed a high-fat diet plus pravastatin tablet). There were 20 rats in each group. The body weight and the blood content of total cholesterol (TC), triacylglycerol (TG), high density lipoprotein-cholesterol (HDL-C), low density lipoprotein-cholesterol (LDL-C), NO the and ET of the rats in different groups were measured before experiment and after 30-day treatment. A modified method of cardiac puncture for blood sampling was used for blood collection. Results: Compared with the normal control group, the body weight and the levels of TC, TG, LDL-C and ET in the untreated group were significantly elevated (P<0.01, P<0.05), while the levels of HDL-C and NO were obviously decreased (P<0.05). The body weight and the levels of TC, TG, LDL-C demonstrated significant reduction in pravastatin-treated group and EA-treated group as compared with the untreated group (P<0.01), and the NO content in pravastatin-treated group and EA-treated group was higher than that in the untreated group (P<0.01). Compared with the untreated group, HDL-C level was elevated significantly in pravastatin-treated group, while HDL-C level in EA-treated group was not changed significantly, and there was significant difference in the HDL-C level between pravastatin-treated group and EA-treated group (P<0.01). The level of ET was decreased obviously in pravastatin-treated group (P<0.05), while the level of ET in EA-treated group was not changed significantly (P>0.05).Conclusions: Both EA therapy and pravastatin have efficient regulation of body weight and the content of TC, TG, LDL-C and NO in HLP rats. To some extent, they are able to regulate the imbalance between ET and NO content under the condition of HLP. Western medicine such as pravastatin can regulate the HDL-C level in HLP rats, while the effect of EA therapy on regulation of the HDL-C level is limited.

- Zhou L, Wan WJ, Liu LG, Li X, Zhang HX, Zhang TF. [Effects of Electroacupuncture at “Fenglong” (ST 40) on NO, ET and CGRP Levels in the Rat with Hyperlipidemia]. Chinese Acupuncture and Moxibustion. 2008;28(1):57. [148113].

  OBJECTIVE: To probe the regulative effect of electroacupuncture (EA) at “Fenglong” (ST 40) on blood lipids in hyperlipidemia (HLP) rats and the mechanism. METHODS: Eighty Wistar rats were randomly divided into a normal group (fed with basal forage), a model group (fed with high fat forage), an EA group (fed with high fat forage + EA treatment), a western medicine group (fed with high fat forage + Pravastatin sodium). Contents of serum total cholesterol (TC), triacylglycerol (TG), high density lipoprotein-cholesterol (HDL-C), low density lipoprotein-cholesterol (LDL-C), endothelin (ET), nitric oxide (NO) and calcitonin gene-related peptide (CGRP) were determined before and after treatment. RESULTS: Compared with the normal group, the body weight, levels of TC, TG, LDL-C and ET were significantly elevated ($P < 0.05$, $P < 0.01$) and the levels of HDL-C, NO and CGRP were significantly decreased ($P < 0.05$) in the model group; compared with the model group, the body weight, levels of TC, TG and LDL-C were significantly decreased ($P < 0.01$) and the levels of NO and CGRP were significantly increased in the western medicine group and the EA group ($P < 0.01$, $P < 0.05$); compared with the EA group, HDL-C level significantly increased in the western medicine group ($P < 0.01$), and ET level decreased in the EA group and the western medicine group with no significant difference between the two groups ($P > 0.05$). CONCLUSION: Both EA and Pravastatin sodium have better benign regulative effects on TC, TG, LDL-C, NO and CGRP and can decrease ET level to a

certain extent in the rat of hyperlipidemia.

- Xie JP, Liu GL, Qiao JL, Gu Q, Gai YN, Huang SF, Gao AA, Zhou Y, Li XH, Wang CY, Liu RQ, Jia JJ. [Multi-Central Randomized Controlled Study on Electroacupuncture at Fenglong (ST 40) for Regulating Blood Lipids]. Chinese Acupuncture and Moxibustion. 2009;29(5):345-8. [153700].

  To investigate the clinical effects of electroacupuncture (EA) at Fenglong (ST 40) on blood lipids. METHODS: Two hundred and four patients of hyperlipidemia were randomly divided into a Fenglong group and a Xuezhikang group, 102 cases in each group. The patients in the Fenglong group were treated with electroacupuncture at Fenglong (ST 40). After arrival of qi, the needles were connected with acupoint nerve stimulator (LH 202 H type, HANS). The primary parameters of EA: for high triglycerides (TG) type, AM 50 Hz, intensity 1 mA, needle-retained time 20 min, twice per week; for high cholesterol (CHO) type, AM 100 Hz, intensity 1 mA, needle-retained time 30 min, thrice per week; for high low-density-lipoprotein (LDL-C) type, the same parameters as the high CHO type except the tolerable and comfortable intensity; for the mixing type, corresponding methods were alternatively used. The patients in the Xuezhikang group received Xuezhikang capsule orally, 2 capsules each time and twice daily, for total 11 weeks. RESULTS: The total effective rates of the Fenglong group and the Xuezhi-kang group were 83.0% and 85.9%, respectively, with no significant difference between the two groups ($P > 0.05$), and there was no significant differences in the function of regulating blood lipids between the two groups (all $P > 0.05$). After one month follow-up survey, the total CHO, TG and LDL-C decreased and high-density-lipoprotein (HDL-C) increased, of which there was a significant difference in TG reduction ($P < 0.05$). There were no relapses in both groups. CONCLUSION: EA at Fenglong (ST 40) can effectively regulate blood lipids with a better after-effect, which can be applied as a safe and effective method to replace medication for regulating blood lipids.

- Zhang HX, Wang Q, Huang H, Yue W, Qin PF. [Effect of Electroacupuncture at “Fenglong” (ST 40) on Rats With Hyperlipidemia and its Mechanism]. Chinese Acupuncture and Moxibustion. 2012;32(3):241-5. [162308].

  OBJECTIVE: To explore the mechanism of electroacupuncture(EA) at “Fenglong” (ST 40) in hyperlipidemia (HLP) rats. METHODS: Forty health SD rats were randomly divided into a normal control group (group A), a high fat forage feed group (group B) and a high fat forage feed treatment group (group C), a high fat forage + normal forage feed group (group D) and a high fat forage + normal forage feed treatment group (group E), eight rats in each group. EA was applied at “Fenglong” (ST 40) for the rats in group C and group E, once daily. After treatment of 30 days, blood lipid levels of rats, including total cholesterol (TC), triglyceride (TG), low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C) in plasma were tested. Real time polymerase chain reaction (RT-PCR) and Western Blotting were applied to detect the gene expression changes of the contents of ATP-binding cassette transporter A1 (ABCA1), peroxisome proliferator-activated receptor alpha (PPARalpha), liver X receptor alpha (LXR-alpha) and retinoid X receptor alpha (RXR-alpha) in liver tissue of rats. RESULTS: Compared with group A, the contents of TC, LDL-C were significantly elevated in group B and group D (all $P < 0.01$); compared with group B, above indices were significantly decreased in group D (all $P < 0.01$). After the treatment of EA at “Fenglong”(ST 40), the contents of TC, LDL-C were significantly decreased (all $P < 0.01$), and the contents of TG, HDL-C did not change obviously (all $P > 0.05$). Compared with group A, the mRNA and protein contents of ABCA1, PPARalpha, LXR-alpha and RXR-alpha were decreased obviously in group B and group D (all $P < 0.01$). But compared with group B, the above indices were decreased in the group D. There were signficantly increasing in the protein content of ABCA1, PPARalpha, RXR-alpha and LXR-alpha mRNA after the treatment of EA (all $P < 0.05$). CONCLUSION: EA at “Fenglong” (ST 40) has some therapeutic effect on decrease the content of TC, LDL-C in rats of hyperlipemia and improve the gene expression of ABCA1, PPARalpha, LXR-alpha and RXR-alpha mRNA so as to promote reverse cholesterol transport.

- Jin Heng, Zhang Hong-Xing. [Clinical Study en Embedding Thread at Fenglong Point in the Treatment of Hyperlipemia]. Journal of Clinical Acupuncture and Moxibustion. 2012;28(4):8. [175107].

  Objective: To probe into an effective therapy for hyperlipemia. Methods: Sixty cases of Hyperlipemia were randomly divided into observation group (n =30) treated by embedding thread at Fenglong point, and the medicine control group (n = 30) treated by medicine. Observation group was treated with embedding thread once a week, and its treatment lasted four weeks. The medication group was given medication of atorvastatin calcuim 10 mg every night, for continually one month. Results: Two groups of patients' blood

lipid had no significant difference ( P > 0. 05). Conclusion: Both embedding thread and atorvastatin calcuim have positive effects on the blood lipid.

- Xiao Y, Le W, Huang H, Zhou L, Tian JY, Chen YF. [Effect of Electroacupuncture of “Fenglong” (ST 40) on Levels of Blood Lipid and Macrophage TNF-Alpha and Il-6 in Hyperlipidemic Rats]. Acupuncture Research. 2013;38(6):459-64. [164574].

  OBJECTIVE: To observe the effect of electroacupuncture (EA) stimulation of “Fenglong” (ST 40) on blood lipid contents and inflammatory factor levels in hyperlipemia rats so as to elucidate its mechanism underlying improvement of hyperlipemia. METHODS: Fifty male SD rats were randomized into 5 groups: normal, model, diet -control, EA intervention (EA), diet-control + EA groups, with 10 rats in each group. Hyperlipemia model was established by feeding the animals with high-fat diet for 30 days. After modeling, rats in the diet-control group were fed with routine fodder. EA was applied to bilateral “Fenglong” (ST 40) for 30 min, once daily for 30 days. Following intraperitoneal injection of 1640 culture fluid, the peritoneal fluid was collected and centrifuged for extracting macrophages. Flow cytometry (FCM) was employed to determine the levels of tumor necrosis factor alpha (TNF-alpha) and interleukin-6 (IL-6) after adding fluoresce-labeled antibodies. RESULTS: The contents of serum TC and LDL-C were remarkably higher and HDL-C level was significantly lower in the model group than in the normal group (P < 0.01). After EA intervention, serum TC and LDL-C showed an apparent decrease (P < 0.01). Compared with the normal group, percentages of CD11 b, TNF-alpha and IL-6 were significantly increased in the model group (P < 0.01), while in comparison with the model group, percentages of CD11 b in both EA and diet-control + EA groups, TNF-alpha and IL-6 percentages of macrophages in the diet-control, EA and diet-control + EA groups were notably decreased (P < 0.05, P < 0.01). The effects of the diet-control + EA group were considerably superior to those of the diet-control group in lowering CD11 b, TNF-alpha and IL-6 percentages (P < 0.05, P < 0.01). No significant differences were found between the diet-control and EA groups in the aforementioned indexes (P > 0.05). CD11 b level indicates changes of macrophage level due to its specific marker character. CONCLUSION: EA stimulation of “Fenglong” (ST 40) is effective in lowering serum TC, LDL-C, and macrophage TNF-alpha and IL-6 levels in hyperlipemia rats.

- Zhang HX, Wu H, Huang H, Xiao Y, Wang D. [Effects Of Electroacupuncture Stimulation Of “Fenglong” (ST 40) On Expression Of Liver ATP-Binding Cassette Transporter A 1 mRNA And Protein In Rats With Hyperlipidemia]. Acupuncture Research. 2013;38(2):100-5. [164641].

  OBJECTIVE: To observe the effect of electroacupuncture (EA) at “Fenglong” (ST 40) on blood lipid levels and hepatic ATP binding cassette transporter A 1(ABCA 1) mRNA and protein expression in hyperlipidemia rats, so as to study its mechanism underlying improvement of HLP. METHODS: Forty SD rats were randomized into normal control, model,diet control, EA, and EA+ diet control groups, with 8 rats in each group. Hyperlipidemia model was established by feeding the animals with high fat forage for 28 days. After modeling, rats of the two diet control groups were fed with basal forage. EA (2 mA, 2 Hz/ 100 Hz) was applied to bilateral ST 40 for 30 min, once daily for 28 days. Plasma total cholesterol (TC), triglyceride (TG), low-density lipoprotein cholesterol (LDL-C), and high-density lipoprotein cholesterol (HDL-C) contents were detected by automatic biochemistry analyzer, and the expression levels of ABCA 1 mRNA and protein in the liver tissue were assayed by in situ hybridization(ISH), RT-PCR and Western blot, respectively. RESULTS: Compared with the normal control group, the contents of plasma TC and LDL-C were apparently increased (P<0.01) and the expression levels of hepatic ABCA 1 mRNA (detected by both ISH and RT-PCR) and ABCA 1 protein were significantly decreased in the model group (P<0.01). In comparison with the model group, plasma TC and LDL-C contents were significantly decreased and the expression levels of hepatic ABCA 1 mRNA and protein were significantly up-regulated in the EA group and EA+diet control group( P<0. 01). The effects of EA+ diet control were significantly superior to those of diet control in down-regulating plasma TC and LDL-C levels and up-regulating hepatic ABCA 1 mRNA and protein expression levels(P<0. 01). CONCLUSION: EA stimulation of “Fenglong”(ST 40) can decrease the load of blood cholesterol and suppress the down-regulation of hepatic ABCA 1 mRNA and protein expression in hyperlipidemia rats, which may contribute to its effect in improving hyperlipidemia.

- Rerksuppaphol L, Rerksuppaphol S. A Randomized Controlled Trial Of Electroacupuncture At Body Acupoints And Fenglong For Regulating Serum Lipids In Dyslipidemic Patients In Thailand. Complement Ther Clin Pract. 2014;20(1):26-31. [170129].

  The primary objective of this randomized, controlled, open-label study was to compare the efficacy of body

acupuncture and Fenglong method in controlling serum lipids in patients with dyslipidemia in Thailand. Patients were randomized into two treatment groups (body acupuncture and Fenglong) and a control group. By the end of intervention period, serum lipid level in both treatment groups was significantly lower than its baseline value while in the control group serum lipid levels significantly increased during the same period. At follow-up visit, total cholesterol and LDL cholesterol were significantly lower in both treatment groups when compared to the control group. The effect of both acupuncture interventions was seen in both obese and non-obese patients. In conclusion, body acupuncture and Fenglong method have a positive impact on the regulation of serum lipids that is sustained after the treatment regardless of patient's baseline weight.

- Chen YF, Tian JY, Xiao Y, Wu H, Huang H, Zhang HX. [Effects of Electroacupuncture at “Fenglong” (ST 40) on Formation of Macrophage-Derived Foam Cell and Efflux of Cholesterol in Hyperlipidemia Rats]. Chinese Acupuncture and Moxibustion. 2014;34(5):475-9. [174783].

  OBJECTIVE: To explore action mechanism of electroacupuncture (EA) at “Fenglong” (ST 40) for treatment of hyperlipidemia. METHODS: Forty SPF-grade SD rats were randomly divided into a normal group (group A), a model group (group B), a model diet-control group (group C), a model + EA group (group D) and model diet-control + EA group (group E), 8 cases in each one. The rats in group A were fed with normal diet continuously while those in the rest 4 groups were fed with high-fat diet to establish hyperlipidemia model. Afterwards, the rats in group C and group E were fed with normal diet, while EA at “Fenglong” (ST 40) was applied in group D and group E, 30 min per time, once a day. After 28 days of treatment, macrophage was collected in each group. Oil red O-staining was applied to detect the formation of foam cells, and enzyme-linked immunosorbent assay (ELISE) was adopted to measure the contents of total cholesterol (TC) in macrophage and analyze the rate of cholesterol efflux. RESULTS: The counts of positive cells of oil red O-staining and the contents of TC in the group B, group C and group D were significantly increased compared with those in the group A (all $P < 0.01$). The counts of positive cells and contents of TC in the group C, group D and group E were significantly clecreased compared with those in the group B (all $P < 0.01$), and the decline in group D was more obvious than that in the group C (all $P < 0.01$). Compared with group C and group D, the counts of positive cells and contents of TC in the group E was obviously decreased (all $P < 0.01$), which was not statistically different from group A ($P > 0.05$). In the meantime, compared with group C, the rate of cholesterol efflux in group D and group E was significantly increased (both $P < 0.01$), and the rise in group E was more obvious than that in the group D. CONCLUSION: The electroacupuncture at “Fenglong” (ST 40) could significantly prohibit the transformation of macrophage into foam cell and increase rate of cholesterol efflux in macrophage, which could prevent and reverse the formation of foam cell and play an essential role in treating hyperlipidemia and stopping it from developing into a further level.

- Wang Qiong , Tian Jia-Yu , Xiao Ying , et al. [Effect of Electroacupuncture at Point Fenglong on the Expressions of Peritoneal Macrophage CD11b and ICAM-1 in Hyperlipidemia Rats]. Shanghai Journal of Acupuncture and Moxibustion. 2014;33(10):951. [184827].

  Objective To investigate the effect of electroacupuncture at point Fenglong(ST4O) on the expressions of macrophage surface antigen CD 1 lb and intercellular adhesion molecule-1 (ICAM- 1) in hyperlipidemia rats. Method Forty healthy SD rats were randomly allocated to normal control, high fat diet, high fat+common diet, high fat diet and treatment, and high fat+common diet and treatment groups. After 28 days of treatment with electroacupuncture at point Fenglong, blood lipid levels, namely, total cholesterol (TC), triglyceride (TG), low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol (HDL-C) contents were measured in every group ofrats. The expressions ofperitoneal macrophage surface antigen CD1 lb and ICAM-1 were examined using flow cytometry (FCM) in every group ofrats. Result Plasma TC and LDL-C increased significantly in the high fat diet group of rats compared with the normal control group ($P<0.01$). In the high fat+common diet group of rats, serum TC and LDL-C decreased significantly in comparison with the high fat diet group ($P<0.01$) but increased significantly in comparison with the normal control group ($P<0.01$). After treatment with electroacupuncture at point Fenglong, rat plasma TC and LDL-C decreased significantly ($P<0.01$) and TG and HDL-C did not change significantly ($P>0.05$). The expression rates of macrophage CD1 lb and ICAM-1 increased significantly in the high fat diet group of rats compared with the normal group ($P<0.01$). In the high fat+common diet group of rats, the expression rates of macrophage CD1 lb and ICAM-1 decreased significantly in comparison with the high fat diet group ($P<0.05$) but increased significantly in comparison with the normal group ($P<0.01$). The expression rates of CD1 lb and ICAM-1 decreased significantly in the high fat diet and treatment group compared with the high fat diet group ($P<0.01$) and decreased significantly in the high fat+common diet and treatment group compared

with the high fat+common diet group (P<0.01) and the high fat diet and treatment group (P<0.01). Correlation analysis showed that CD 1 lb and ICAM-1 levels had a significantly positive correlation (r=0.947, P<0.01). Conclusion Electroacupuncture at point Fenglong can significantly dow11-regulate blood fat TC and LDL-C levels and the expressions of macrophage CD11b and ICAM-1 in hyperlipidemia rats. It has a certain therapeutic effect on hyperlipidemia.

- Zhang Bao-Zhen, Zhang Kai, Liu Yu-Zhen. [Meta-Analysis on RCTS of Acupuncture and Moxibustion at Fenglong Point for Treatment of Hyperlipemia]. Chinese Journal of Information on Traditional Chinese Medicine. 2014;8:11-15. [186946].

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|---|---|
| **Objectives** | To systematically review the efficacy and safety of acupuncture and moxibustion at Fenglong point (ST40) for the treatment of hyperlipemia. |
| **Methods** | Systematic searches were conducted in PubMed, Embase, the Cochrane Library, CNKI, VIP, CBM and WanFang Data, assisted by manual retrieval, and the RCTs of comparative study on acupuncture and moxibustion at Fenglong point and oral administration drugs were included. Data were extracted and evaluated by two reviewers independently with a specially-designed extraction form. The Cochrane Collaboration's RevMan 5. 0 software was used for Meta-analysis. |
| **Results** | A total of **6 RCTs involving 701 patients** were included. The results of Meta-analysis showed that the total effective rate in acupuncture and moxibustion at Fenglong point for the treatment of hyperlipemia was similar with statins medicine or Xuezhikang capsule. Acupuncture Fenglong point and statins medicine had significant difference in decreasing cholesterol and increasing HDL-C, with less side effects. |
| **Conclusions** | **Acupuncture at Fenglong point is safe and effective in the treatment of hyperlipemia**, but still needs more high-quality RCTs for confirmation. |

- Ren Luming, Yang Guang. [A summary of research on hyperlipemia treated by acupuncturing Fenglong acupoint]. Int J Trad Chin Med. 2015;37(5): 466-70. [165583].

  A summary and analysis of acupuncture, electro-acupuncture, moxibustion, injection of acupoint, and research progress from ancient and modern related literatures on the treatment of hyper-lipemia by acupuncturing Fenglong acupoint was made. It was cognized and affirmed that Fenglong acupoint has the unique superiority of definite curative effect and little poisonous side effect in treating hyperlipemia.

## 6.4. Cirrhose

- Lee FY, Huo ZJ, Zhang L, Guo J, Chen H, Liu T, Peng B, Hong PX, Peng YY, Fan YF, Chen YP. The Effects of Needling Fenglong (ST40) and Neiguan (PC6) on IL-17 of ApoE-Gene-Knockout Mice's Liver. Evid Based Complement Alternat Med. 2014;:. [170022].

  The aim of the present paper was to observe the effects of needling ST40 and PC6 on IL-17 of ApoE(-/-) mice with fatty liver. Forty male ApoE(-/-) mice were randomized into Needling-Acupoint Group, Simvastatin Intragastric Administration Group, Needling Nonacupoint Group, and Model Group. Each was fed with high fat diet for 8 weeks since 16 weeks of age; after 8 weeks of intervention, mice were sacrificed and tested for various examinations. Result showed that the body weight, TC, and serum IL-17 in Needling-Acupoint Group decreased. Compared with Model Group, the immunohistochemical expressions of IL-17 in liver tissue were significantly decreased among the other three groups. In conclusion, acupuncture was able to lower the expression of IL-17 level both in serum and liver tissue in ApoE(-/-) mice, which is helpful to reduce the inflammation and defers the progress from fatty liver to cirrhosis.

## 6.5. Effets Secondaires des gastroscopies

- Yang Jie, Jin Xiao-Jing. [Clinical Study of Acupuncture Intervention in Gastroscopy Side Reaction

by Superficial Needling at Point Fenglong]. Shanghai Journal of Acupuncture and Moxibustion. 2015;34 (5):433. [187344].

> Objective To investigate the clinical intervention effect of superficial needling at point Fenglong on gastroscopy side reaction. Methods Eighty-two gastroseopy patients were randomly allocated to treatment and control groups, 40 cases each. The treatment group received gastroscopy and superficial needling at point Fenglong, and the control group, gastroscopy and sham acupuncture at point Fenglong. The pain score and the incidence of nausea and vomiting were observed in the two groups during gastroscopy. Results There was a statistically significant difference in the pain score between the two groups (Pe (0. 05). The incidence of nausea and vomiting was 3 1 . 7% in the treatment group and 65. 9% in the control group; there was a statistically significant difference between the two groups (Pez0. 05). Conclusion Superficial needling at point Fenglong can effectively reduce the incidence of gastroscopy side reaction.

## 6.6. Paraplégie

- Li Jingjiang et al. [Treating Lower Extremities Paralysis of Apoplexy by Deeply Acupuncturing Point Fenglong. A Report of 160 Cases]. Liaoning Journal of Traditional Chinese Medicine. 1993;20(7):37. [46444].

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