密集顱部電針刺激(DCEAS)輔助治療抑鬱症臨床研究新聞發布會

Press conference
DCEAS as an effective additional therapy for major depressive disorder (MDD)

2012-03-29

1

第一部分：

九龍醫院精神科吳文建醫生

Dr Roger NG, Department of Psychiatry, Kowloon Hospital

2

抑鬱症
Major Depressive Disorder

- 抑鬱症在香港十分普遍。十二個月內的男性發病率為10.2%；女性發病率為 14.5%[1]
- 據研究指出，抑鬱症患者中，有32.5% 經常出現自殺念頭[2]
- 另一項關於本地自殺行為的研究發現，抑鬱症患者佔所有自殺者中的 28%[3]

- MDD is a common mental disorder in HK. The twelve-month prevalence in male is 10.2%; in female it is 14.5%[1]
- Approximately 32.5% of MDD patients reported frequent suicidal thoughts[2]
- In a local study on completed suicide, it is revealed that 28% suicide decedents suffered from MDD[3]

1 Lee S, Guo W-J, Tsang A, Mak ADP, Wu J, Ng KL, et al. Evidence for the 2008 economic crisis exacerbating depression in Hong Kong. J Affect Disord. 2010;126(1-2):125-33.
2 Lee S, Tsang A, Kwok K. Twelve-month prevalence, correlates, and treatment preference of adults with DSM-IV major depressive episode in Hong Kong. J Affect Disord. 2007;98(1-2):129-36.
3 Chan SSM, Chiu HFK, Chen EYH, Chan WSC, Wong PWC, Chan CLW, et al. Population-attributable risk of suicide conferred by axis I psychiatric diagnoses in a Hong Kong Chinese population. Psychiatr Serv. 2009;60(8):1135-8.

3

抑鬱症
Major Depressive Disorder

抑鬱症的臨床表現

- 情緒失調（抑鬱／緊張）
- 對事物失去興趣
- 缺乏動力，怠惰
- 易感疲倦
- 集中力／注意力下降
- 自我形象低落，缺乏自信
- 罪咎感，自我評價差
- 對未來悲觀
- 自殘／自殺念頭
- 失眠
- 食慾下降
- 失去性慾

MDD symptoms

- Depressed mood / agitation
- Loss of interest and enjoyment
- Reduced energy leading to increased fatiguability and diminished activity
- Marked tiredness after only slight effort
- Reduced concentration and attention
- Reduced self-esteem and self-confidence
- Ideas of guilt and unworthiness
- Bleak and pessimistic views of the future
- Ideas or acts of self-harm or suicide
- Disturbed sleep
- Diminished appetite
- Loss of libido

4

The ICD-10 Classification of Mental and Behavioural Disorders - Clinical descriptions and diagnostic guidelines *World Health Organization*

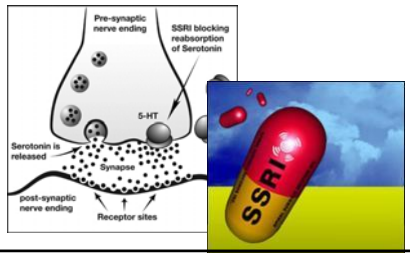
抑鬱症
Major Depressive Disorder

抑鬱症治療

- 一線藥物：
  SSRI 類抗抑鬱藥／選擇性血清素再吸收抑制劑
  例子：氟西汀，西酞普蘭，帕羅西汀，舍曲林

MDD Treatment

- First line drugs:
  selective serotonin reuptake inhibitors (SSRIs)
  e.g. Fluoxetine, Citalopram, Paroxetine, Escitalopram, Sertraline



5

抑鬱症
Major Depressive Disorder

藥物效果欠佳

- SSRI 類抗抑鬱藥物起效緩慢（須時 4 – 8 周），增加患者自殺風險
- 在對藥物起效的患者之中，只有部分能完全康復，部份患者容易復發（3 年發作率約為 30%）
- 藥物副作用明顯：失眠，食慾下降，體重下降，嘔吐，腸胃不適
- 主流抗抑鬱藥物在接近四成患者中未能發揮效果
- 六成患者在持續服藥一年後，症狀沒有顯著改善

Limitations of MDD medications

- The delay onset of the actions of SSRIs (4-8 weeks) prolongs patients' suffering and exposes them to greater risk of suicide
- Only a portion of responding patients will achieve full recovery. Some patients may experience relapse (30% relapse rate in 3 years)
- Various side effects:
  sleep disturbance, appetite and weight disturbance, nausea, discomfort of digestive system.
- Up to 40% of patients fail to show a response to first-line antidepressant treatment
- 60% of depressed patients treated with medication still met the criteria for caseness at 1 year

6

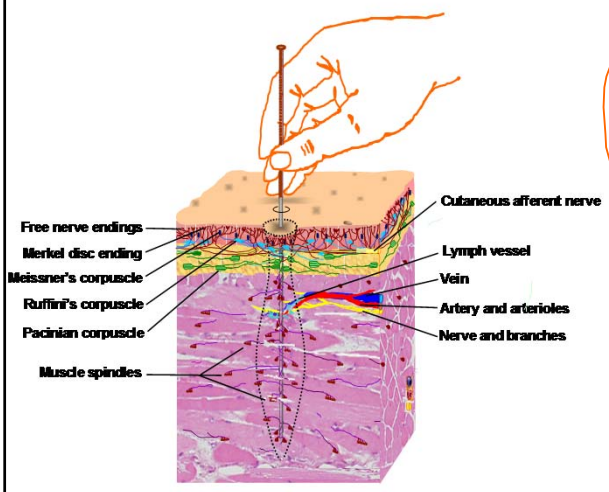
第二部分：

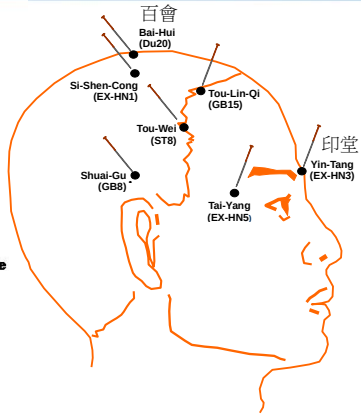
香港大學中醫藥學院：張樟進博士

Dr ZHANG Zhang-Jin, School of Chinese Medicine, HKU

7

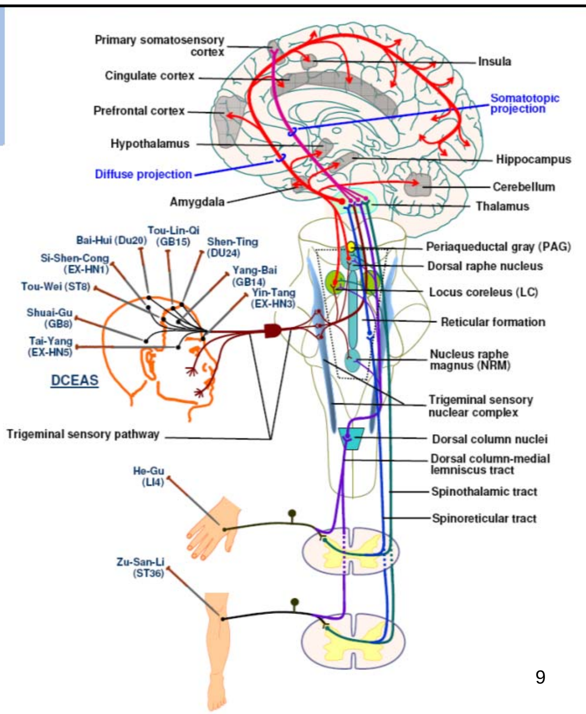
神經針刺單元與傳統穴位
Traditional acupoints and Neural Acupuncture Unit (NAU)





8

DCEAS 中樞通路



9

中醫對抑鬱症的認識
Understandings of MDD by TCM

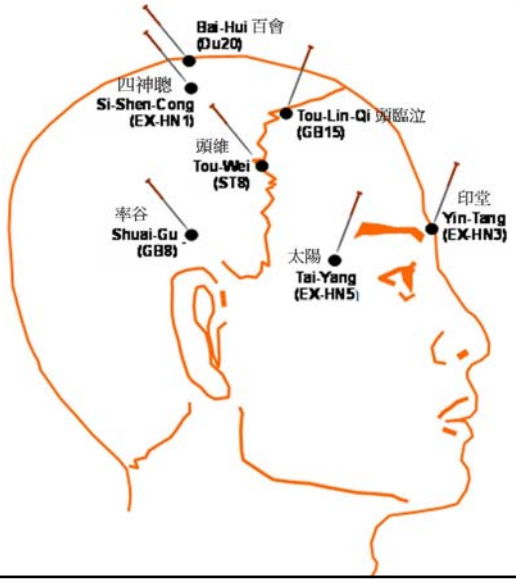
- 抑鬱症屬中醫「鬱症」的範圍。
  - 「氣血沖和 ,萬病不生 ,一有怫郁 ,諸病生焉。 」《丹溪心法•六鬱 》
  - 「諸鬱，臟氣病也，其本源於思慮過深，更兼臟氣弱，故六鬱之病生焉。」《雜病源流犀燭・諸鬱源流》
- 抑鬱症患者較多見於更年期女性。中醫認為，更年期女性腎中經期由旺盛階段逐漸步向衰退。在此基礎上 ,復因惱怒、思慮、悲哀、憂愁等情志異常而使人體氣機紊亂 ,導致鬱症發生。

- It refers to TCM “depression” category
  - Diseases do not occur if there is the balance between blood and qi; the disease would immediate results once the balance is disrupted “*Danqi Xinfa-Liu yu*”
  - Depression origins from the weakness, and hence the dysfunction of the visceral *“Zabing Yuanliu Xizhu-Zhuyu Yuanliu”*
- Women in their peri-menopause / menopause are more susceptible to depression. According to TCM theory, the kidney Qi of menopause women is in a stage of gradual decline. If they are emotionally disturbed, the circulation of body Qi is likely to be disrupted, and thus the occurrence of depression.

TCM Translation reference: WHO international standard terminologies on traditional medicine in the western pacific region
金智生、吳立文：鬱病辨治規律淺析，中醫藥學刊，2003；1(6)：1921-1922
胡佳、瞿融：圍絕經期抑郁癥的中醫辨治體會，江蘇中醫藥 ，2011；11(15)

10

密集顱部電針之穴位
Acupoints for DCEAS



11

密集顱部電針治療抑鬱症臨床研究
MDD-DCEAS Randomised Controlled Trial

- **2009** 年 **5** 月至 **2011** 年 **3** 月期間於九龍醫院精神科進行。
- 參加者皆為對藥物反應欠佳的抑鬱症患者，經精神科醫生轉介。
- 共 **73** 人參與研究。
- 參加者屬華裔人士，年齡介乎 **25** 至 **65** 歲。
- 根據 **DSM-IV-TR** 被確診患上重症抑鬱症（**HAMD-17 / HRDS** 量表可測出 **18** 分或以上；**CGI-S** 可測出 **4** 分或以上）。
- 患病時間由數月至數年不等。

- Conducted between May 2009 to March 2011 in Kowloon Hospital Psychiatry Department
- Patients showing unsatisfactory response were referred to join the study by psychiatrists
- 73 participants were recruited
- All are ethnic Chinese aged 25 – 65
- Confirmed diagnosis of **major depressive disorder (severe depression)** according to DSM-IV-TR (HAMD-17 / HDRS score of 18 or above; and CGI-S score of 4 or above)
- Suffered from MDD for several months to several years

12

參試者的基線特徵
Baseline characteristics of participants

Variables	n-EA (n = 34)	DCEAS (n = 36)	*P* values (*t* or χ^2 test)
Female, n (%)	33 (97.1)	25 (69.4)	0.006
Age (yrs)[a]	48.2±9.8	46.3±9.9	0.414
Duration of MDD (yrs)[a]	7.3±7.1	7.9±8.0	0.744
No. of previous depressive episodes[a]	3.6±4.4	4.9±6.1	0.332
No. (%) of patients with first-onset MDD	3 (8.8)	2 (5.5)	0.669
No. (%) of patients with previous psychiatric admission	8 (23.5)	7 (19.4)	0.901
No. (%) of patients with family members having mental illnesses.	9 (26.5)	13 (36.1)	0.800
No. (%) of patients with previous acupuncture treatment[b]	22 (64.7)	24 (66.7)	0.937
No. (%) of patients receiving psychotropic medications at study entry[c]	6 (17.6)	7 (19.4)	0.909
SSRIs	3	3	
SNRIs	1	1	
Mood stabilizers	1[d]	1	
Benzodiazepines	2	2	
Baseline HAMD-17 score[a]	23.1±3.6	23.9±3.8	0.321
Baseline CGI-S[a]	4.3±0.5	4.4±0.5	0.760
Baseline SDS score[a]	40.6±14.5	41.9±14.0	0.704

[a]Continuous data are expressed as mean ± SD.
[b]Auricular acupuncture was included.
[c]The use of medications did not exceed one week.
[d]One patient received a combination of SNRIs and mood stabilizers.
n-EA, noninvasive electroacupuncture; DCEAS, dense cranial electroacupuncture stimulation; MDD, major depressive disorder; SSRIs, selective serotonin re-uptake inhibitors; SNRIs, Serotonin–norepinephrine reuptake inhibitors; HAMD, 17-item Hamilton Rating Scale for Depression; CGI-S, Clinical Global Impression-Severity; SDS, Self-rating Depression Scale.
doi:10.1371/journal.pone.0029651.t001

13

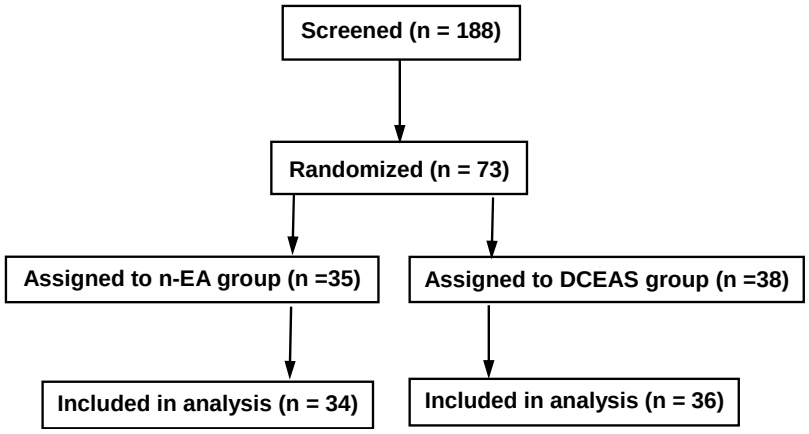
研究方法
Methodology

- 參加者經電腦隨機抽樣被編入電針組或安慰組。
- 電針組：接受密集顱部電針刺激
- 安慰組：接受模擬密集顱部電針治療
- 密集顱部電針治療共 **9** 次（每次 **45** 分鐘，每周 **3** 次，連續 **3** 周）
- 兩組患者同樣服用抗抑鬱藥物氟西汀
- 期間接定期接受臨床評估

- Participants randomised to DCEAS or control group;
- DCEAS group: received DCEAS
- Control group (n-EA group): received simulated DCEAS
- 9 sessions of treatment (45 minutes per session, 3 sessions per week, for 3 weeks)
- Both groups took antidepressant fluoxetine
- Participants were assessed regularly during the study period

14

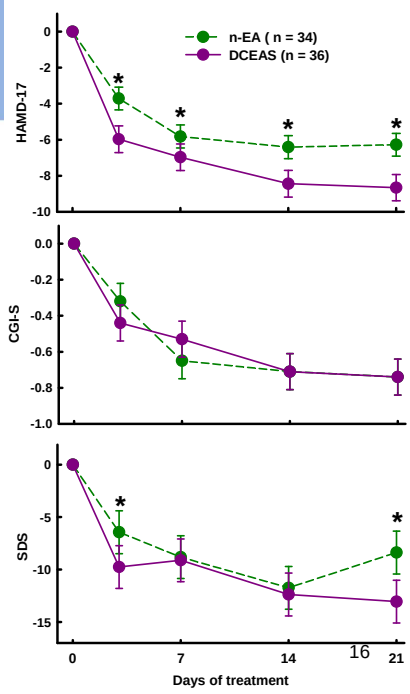
研究流程圖
Study flow



15

研究結果
Results

- 接受電針組的抑鬱指數(臨床評估抑鬱指數HAMD-17，自我評估抑鬱指數 SDS)的下降較安慰組顯著
- **DCEAS group shows significant improvement in depression scores (HAMD-17 and SDS)**



16

研究結果
Results

密集顱部電針不會為患者帶來明顯副作用
DCEAS does not bring significant side effects

Table 3. Adverse events occurred in at least 5% of patients in either group.

Event	n-EA (n = 34)	DCEAS (n = 36)	χ^2	*P* value
Dizziness	15 (44.1)	11 (30.6)	0.858	0.354
Tiredness	10 (29.4)	15 (41.7)	0.672	0.412
Nausea	10 (29.4)	10 (27.8)	0.013	0.910
Excessive sweating	9 (26.5)	6 (16.7)	1.403	0.236
Headache	8 (23.5)	10 (27.8)	0.018	0.894
Transient tachycardia	8 (23.5)	9 (25.0)	0.018	0.892
Insomnia	7 (20.6)	9 (25.0)	0.024	0.877
Uncomfortable for needling sensation	7 (20.6)	14 (38.9)	1.985	0.159
Vomiting	4 (11.8)	3 (8.3)		0.706[a]
Unsteadiness	2 (5.9)	6 (16.7)		0.266[a]
Somnolence	2 (5.9)	6 (16.7)		0.266[a]

[a]*P* values were calculated from Fisher Exact test.
n-EA, noninvasive electroacupuncture; DCEAS, dense cranial electroacupuncture stimulation.
doi:10.1371/journal.pone.0029651.t003

兩組所感到的不適情況相約，反映密集顱部電針刺激不會為患者帶來明顯副作用

17

研究結果
Results

研究結果

- 電針組的患者的抑鬱指數 (HAMD-17, SDS) 顯著下降
- 比較接受治療後第21天期間反應，電針組與安慰組的臨床評估抑鬱指數(HAMD-1)下降差別為2.39分
- 自我評估抑鬱指數 (Self-rating Depression Scale (SDS))的下降差距更大，相差4.68分
- 以臨床觀察數據顯示，電針組對治療的反應達19.4%，而安慰組則只有8.8%

Results

- DCEAS-treated group shows significant improvement in depression scores (HAMD-17 and SDS)
- During day 21 after receiving the treatment, the difference of the two groups' HAMD-17 scores is 2.39
- During day 21 after receiving the treatment, the difference of the two groups' SDS scores is 4.68
- DCEAS intervention also produced a higher rate of clinical significant response compared to n-EA group (19.4% vs 8.8%)

18

研究結果
Results

研究結果

- 電針組的患者在接受第一次針刺後 3 天，病情已有改善
- 密集顱部電針刺激不會為患者帶來明顯副作用

Results

- Greater reduction of scores was observed as early as day 3 after first session of acupuncture treatment
- DCEAS does not bring significant side effects

19

結論
Conclusion

- 密集顱部電針刺激為安全的抑鬱症治療方案
- 研究發現抑鬱症病人在服用抗抑鬱藥物氟西汀的同時，可接受密集顱部電針，以增加治療效果
- 密集顱部電針刺激的長遠效果值得深入研究

- DCEAS is a safe treatment for MDD.
- The study demonstrated that DCEAS is an effective additional therapy to patients with depression who are receiving antidepressant(FLX), which can enhance the treatment efficacy.
- The long term antidepressant efficacy of DCEAS worths further investigation.

20

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21

患者分享與針刺示範

Patient sharing and acupuncture demonstration

22

問答環節

Q & A

DCEAS相關問題
Questions regarding DCEAS

- DCEAS痛嗎?
  一般情況下，患者不會感覺到針刺的疼痛，但可能會有酸麻脹的感覺。
- DCEAS會留疤痕嗎?
  絕大部份情況下，DCEAS不會留疤痕，有極少數人可能會產生瘀腫。一般人凝血機制沒有問題，瘀腫會在短期之內自然消失。
- DCEAS前有什麼準備?
  DCEAS前不宜過於飢餓或疲勞，只要放鬆身體即可。
- DCEAS有副作用嗎?
  DCEAS是一個安全的治療手段，絕大多數不會有不適的感覺或不良反應。有些體質敏感的人可能會有短暫的噁心、眩暈、瘀傷的現象。

- Is DCEAS painful?
  DCEAS treatment may cause the feeling of soreness, numbness, and heaviness, but, in general, does not cause pain or discomfort.
- Does DCEAS leave a scar?
  No, but for some people it may leave a bruise. It will be recovered shortly if the blood congeal mechanisms are normal.
- Any preparation prior to DCEAS?
  People should not be hungry or exhausted before having DCEAS. Relaxation would be the best preparation.
- Does DCEAS have adverse effect?
  DCEAS is safe in general. But for some people, they may have nausea feeling, dizziness or bruise for a short period of time