



**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

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第一部分：

九龍醫院精神科吳文建醫生

**Dr Roger NG, Department of
Psychiatry, Kowloon Hospital**

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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 thoughts²
- In a local study on completed suicide, it is revealed that 28% suicide decedents suffered from MDD³

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.



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



抑鬱症

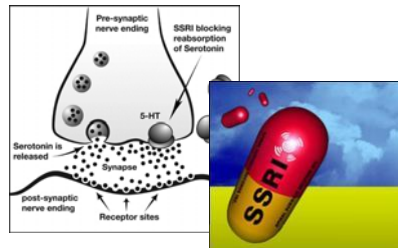
Major Depressive Disorder

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



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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

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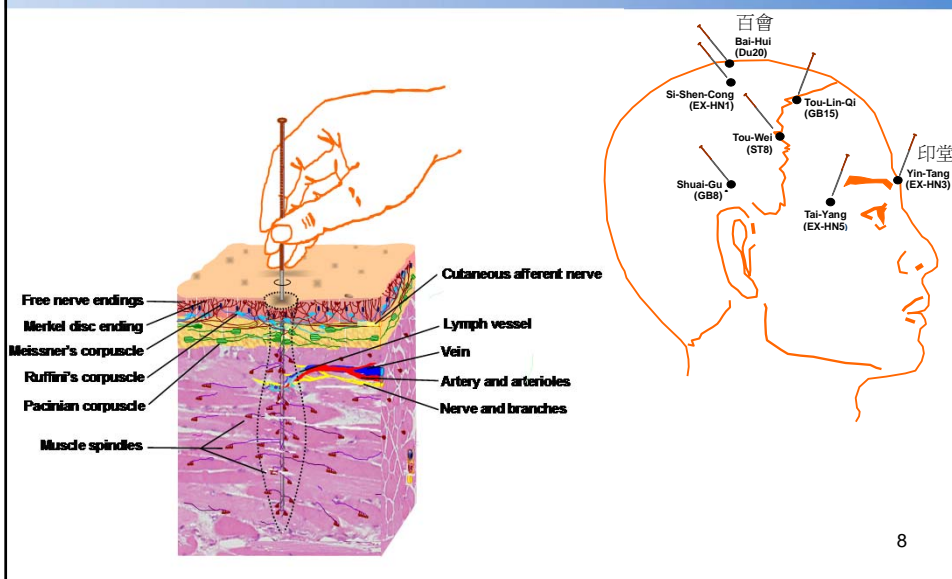
第二部分：

香港大學中醫藥學院：張樟進博士
Dr ZHANG Zhang-Jin, School of
Chinese Medicine, HKU

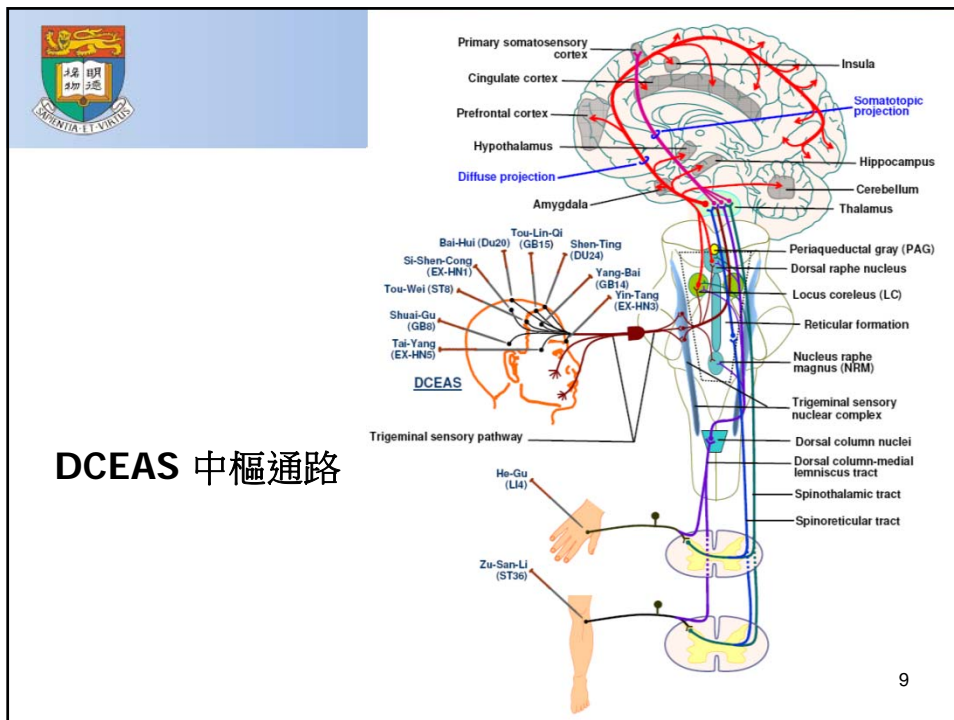
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神經針刺單元與傳統穴位 Traditional acupoints and Neural Acupuncture Unit (NAU)



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

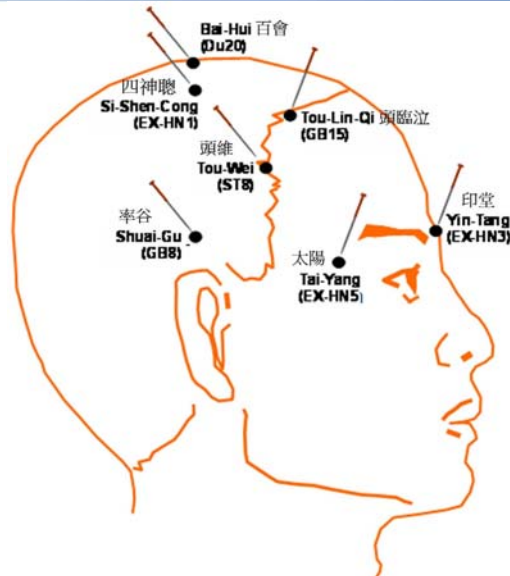
- 抑鬱症屬中醫「鬱症」的範圍。
 - 「氣血沖和，萬病不生，一有怫郁，諸病生焉。」《丹溪心法·六鬱》
 - 「諸鬱，臟氣病也，其本源於思慮過深，更兼臟氣弱，故六鬱之病生焉。」《雜病源流犀燭·諸鬱源流》
- 抑鬱症患者較多見於更年期女性。中醫認為，更年期女性腎中經期由旺盛階段逐漸步向衰退。在此基礎上，復因惱怒、思慮、悲哀、憂愁等情志異常而使人體氣機紊亂，導致鬱症發生。
- It refers to TCM “depression” category
 - Diseases do not occur if there is the balance between blood and qi; the 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
 法管理。編者：謝明。北京：人民衛生出版社，2003：1161-1162-1162
 胡佳、劉繼：編者。北京：人民衛生出版社，2011：111-115

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密集顱部電針之穴位 Acupoints for DCEAS



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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



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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

^aContinuous data are expressed as mean ± SD.

^bAuricular acupuncture was included.

^cThe use of medications did not exceed one week.

^dOne 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 of Illness; SDS, Self-rating Depression Scale.

doi:10.1371/journal.pone.0029651.t001



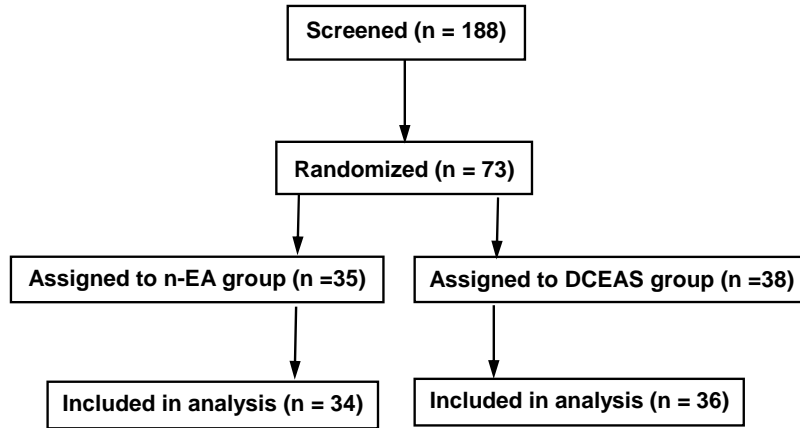
研究方法

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
- 期間按定期接受臨床評估
- 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



研究流程圖 Study flow

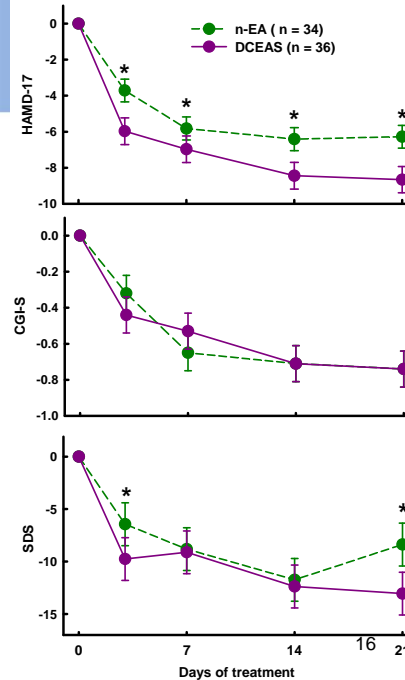


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研究結果 Results

- 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)**





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

^aP 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

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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%)

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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

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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 warrants further investigation.

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研究人員

- 香港大學中醫藥學院副教授
張樟進博士
- 九龍醫院精神科部門主管**吳文建**醫生
- 香港大學中醫藥學院副研究員
萬帥章醫師
- 香港大學中醫藥學院研究生**洪鴻彬**醫師
- 香港大學中醫藥學院研究生**李翠妍**醫師
- 香港大學中醫藥學院研究生**王迪**先生

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Members of research team

- **Dr. ZHANG Zhang-jin**, Associate Professor, School of Chinese Medicine, HKU
- **Dr. Roger NG**, Chief of Service, Department of Psychiatry, Kowloon Hospital
- **Mr. Marksman MAN**(CMP), Research Associate, School of Chinese Medicine, HKU
- **Mr. Ben HUNG**(CMP), Postgraduate student, School of Chinese Medicine, HKU
- **Ms. Jade LEE**(CMP), Postgraduate student, School of Chinese Medicine, HKU
- **Mr. Di WANG**, Postgraduate student, School of Chinese Medicine, HKU

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患者分享與針刺示範

Patient sharing and acupuncture demonstration

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問答環節

Q & A

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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

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