

NADA耳穴針灸改善乳癌患者術後疼痛及生活品質：病例系列研究 NADA ear acupuncture reduces the postoperative pain and improves life quality of breast cancer patients: A case series study

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Purpose

Postoperative life quality is an essential issue in breast cancer care. As an alternative therapy, acupuncture was used for treatment of cancer-related symptoms. National Acupuncture Detoxification Association (NADA) protocol is an ear acupuncture method for substance addiction originally and now becoming an adjuvant therapy for postoperative care. Our study aims to assess the effect of NADA protocol on improving postoperative life quality related issues of breast cancer patients.

Materials and Methods

This case series study collected the breast cancer patients who received NADA protocol after definitive breast surgery in E-Da cancer hospital from August 2021 to September 2022. NADA protocol included 5 acupuncture points. The needles were left in situ for twenty minutes and then removed (Fig.1). The protocol was performed once after the surgery in the operative day and the following three days. The patients could discontinue the protocol anytime by their decision. Patients did pretest and posttest of visual analogue scale (VAS) of pain, VAS of anxiety, and VAS of upper limb muscle stiffness. Patients also did Was-It-Worth-It (WIWI) questionnaire on the last day.

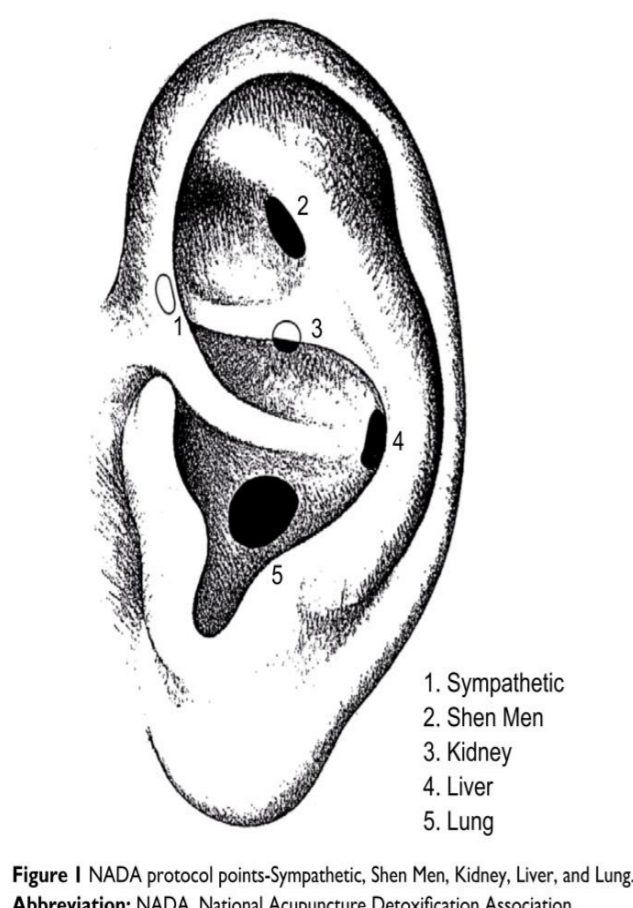
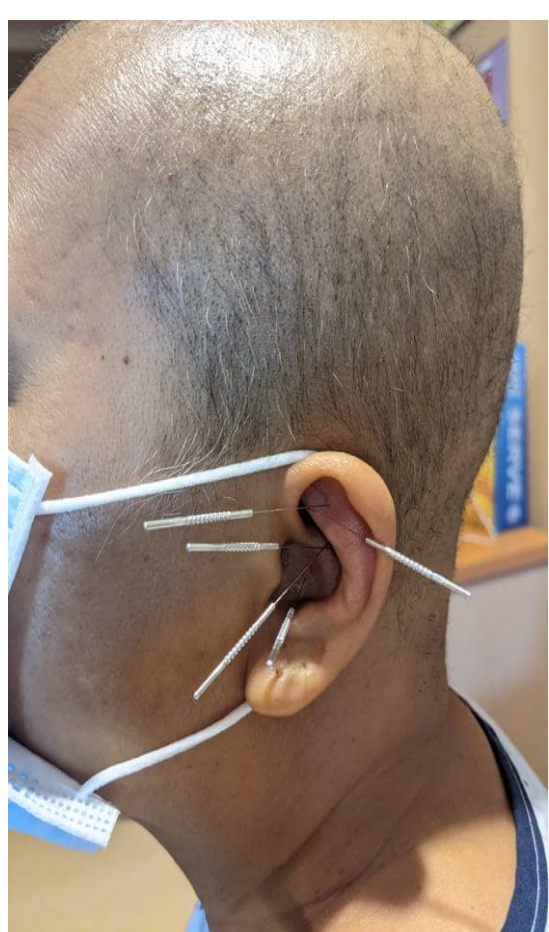


Fig1. The patient Accepted acupuncture and points of NADA protocol

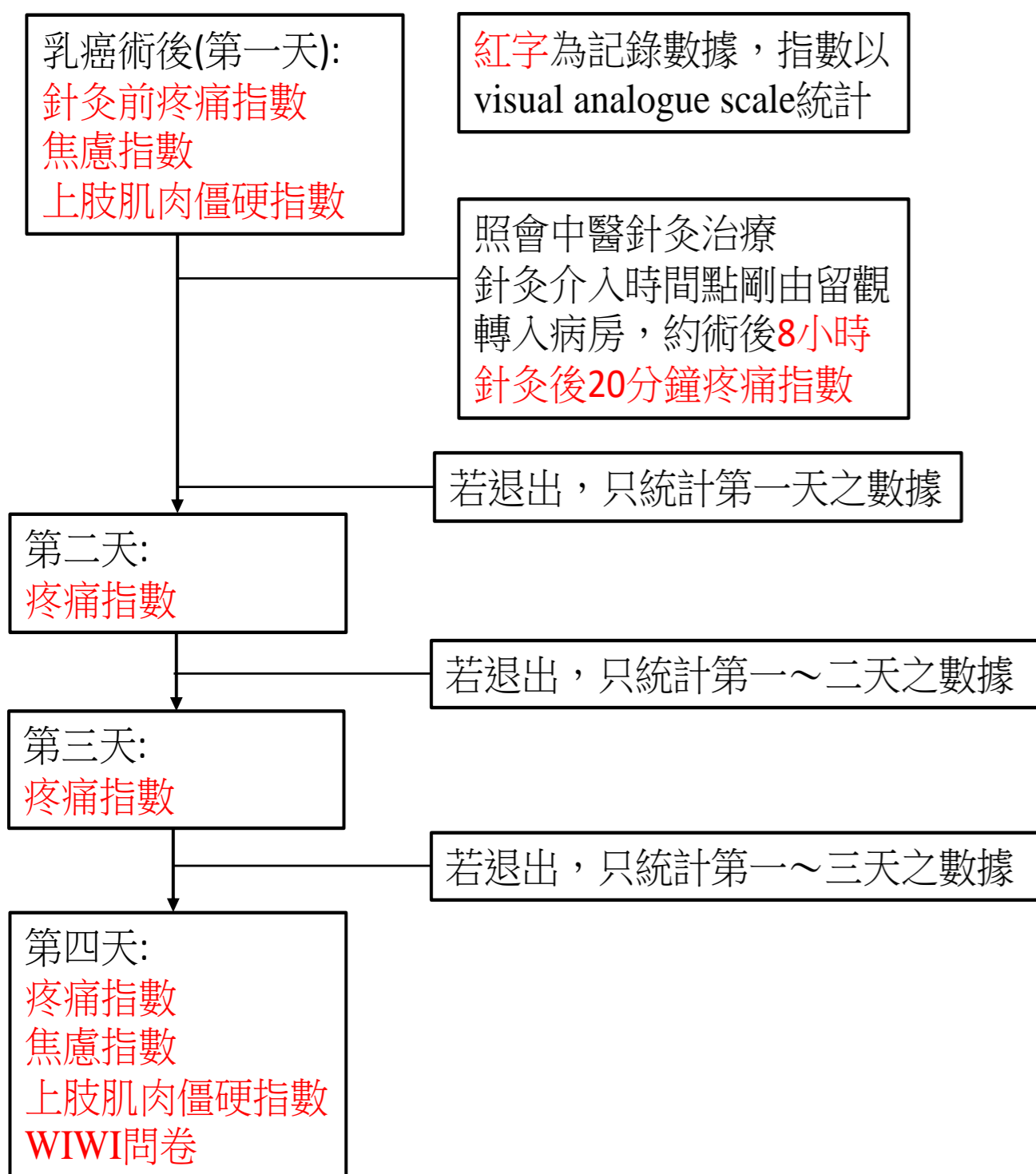


Fig 2. The detailed algorithm of our study

Results

22 patients were consulted after breast cancer surgery. 3 patients were excluded (2 refused, 1 ductal carcinoma in situ). 19 included patients finished first day treatment (Fig 3.). In 11 patients who completed whole protocol, significant difference was noted in pretest and posttest of VAS score of anxiety ($p < 0.001$) and VAS score of upper limb muscle stiffness ($p = 0.03$). VAS score of pain was significant associated before and after acupuncture. After day 2 treatment, significant association of day 3 and day 4 was noted in 11 patients who finished all protocol. No significant difference was noted in other groups (Fig 4.). In WIWI questionnaire, 94.1% of patients answered yes in first 3 questions and 88% in final question (Fig 5.).

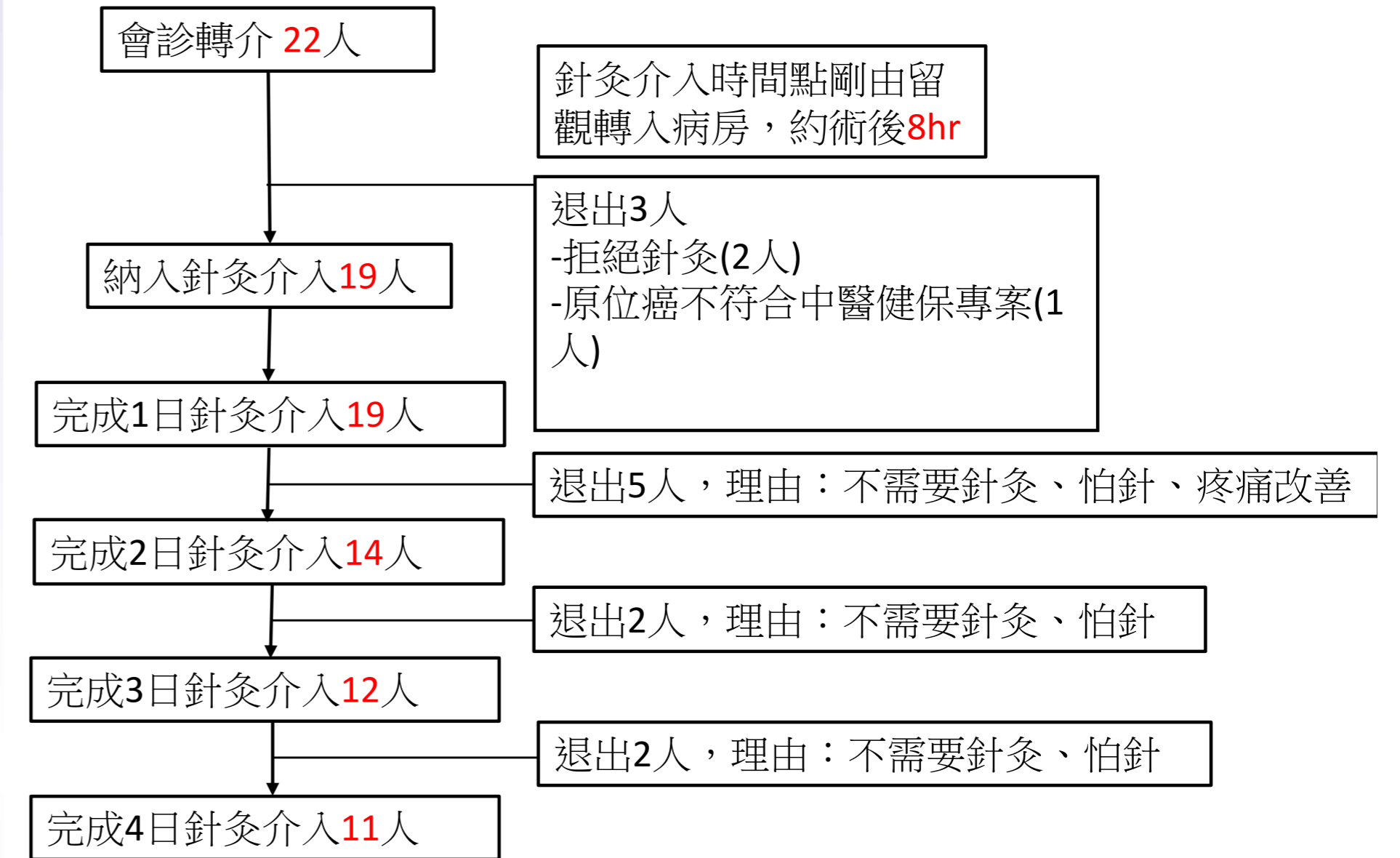


Fig 3. The detailed process and result of our study

Average VAS score	Before acu.	Day 4	P value
Anxiety (n=11)	3.45	2.21	<0.001
Upper limbs muscle stiffness (n=11)	2.29	1.51	0.03

Acu.=acupuncture, 紅字表示和前一天比有顯著差異

	Before acu.	After acu.	Day 2	Day 3	Day 4
N=19	4.66	3.37 ($p < 0.001$)	x	x	x
N=14	4.96	3.43 ($p = 0.001$)	2.89 ($p = 0.068$)	x	x
N=12	5.20	3.75 ($p = 0.005$)	3.13 ($p = 0.068$)	2.96 ($p = 0.305$)	x
N=11	5.31	3.81 ($p = 0.008$)	3.13 ($p = 0.067$)	3 ($p = 0.432$)	2.09 ($p = 0.031$)

Fig 4. Average VAS score of anxiety, upper limbs stiffness and pain in protocol (paired t-test)

1. 與參您中醫針灸治療得值否是	是(94.1%)	否(5.82%)
2. 與參會你, 來重你讓果如中醫針灸治療動活嗎	是(94.1%)	否(5.82%)
3. 加參友朋區社他其議建會你中醫針灸治療嗎?	是(94.1%)	否(5.82%)
4. 與參因否是量質活生的您中醫針灸治療變改而?	善改(94.1%)	化變無(5.82%)
5. 與參您中醫針灸治療何如覺感的	佳期預比(88%)	期預合符(12%) 比預期差(0%)

Fig 5. Result of WIWI questionnaire

Conclusion

NADA protocol is an effective alternative treatment to reduce postoperative pain in the first day after surgery. It also reduced anxiety, and upper limbs stiffness in the following hospital stay. Most of our patients were also satisfied with this acupuncture therapy.