INDICATIONS
OF
PERIOPERATIVE
AURICULOTHERAPY FOR
DEGENERATIVE HAND DISEASES

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WHAT IS AURICULOTHERAPY?
HOW DOES IT WORK?
Paul Nogier’s Auriculotherapy Chart (1966)
WFCMS (World Federation of Chinese Medicine Societies)
London, September 3, 2011

Published in September 2011 (Nomenclature Normative Internationale)
Edition Desclée de Brouwer. Pages 372 to 375
EVIDENCE - PAIN

Etudes sur les potentiels évoqués


IRM fonctionnelle


IT CAN BE EFFICIENT FOR PERI-OPERATIVE PAIN MANAGEMENT
Combination of scientific auriculothesis and peripheral nerve blocks for the perioperative pain management for carpal tunnel surgery

C. Chaix-Couturier, C. Couturier, H. Weickmans
Arago Clinic, Paris, France

Introduction
Persistent use of opioids has been reported to be over 10% in patients undergoing hand surgery. Furthermore, it is established that peripheral block do not prevent the use of opioids following total shoulder replacement. In the present context of increase concerns of opioid addiction associated with surgery, increase considerations have been given to the use of complementary techniques to prevent the use of opioids.

Objectives
This study was designed to assess the analgesic properties of Auriculothesis in patients undergoing carpal tunnel surgery.

Materials & Methods
Thirty-eight patients scheduled for carpal tunnel surgery were included in this analysis.

Contraindication was obtained from each patient before inclusion in the study. The surgery was performed using an axillary block and sedation in addition. Auriculothesis (n=19) consisted on the stimulation of 4 ear points including hand master point, stellar ganglion, C7 radiocubital and thalamus on the ear ipsilateral to the surgical site and the L5 sympathetic ganglion ear point on the contralateral ear.

The primary end point was the comparison of the area under the curve (AUC) of the pain, using a visual analogue scale (VAS), between postoperative day 1 and 3. The secondary end points included the comparison of VAS and opioids consumption at day 1, day 2, day 3 and the request of analgesics at D2/1.

Results & Discussion
The use of Auriculothesis was associated with a significant decrease in VAS AUC (1.0 vs 3.6; p<0.05).

Auriculothesis was also associated with a significant decrease in VAS on D1 and D2 (D1: mean VAS = 1 in the arm with AT versus mean VAS = 3 in the placebo arm at D1, p < 0.05 and D2: mean VAS = 0.7 in the arm with AT versus mean VAS = 2 in the placebo arm at day 2 p < 0.01). No difference were noticed at day 3. Analgesic consumption was similar in both group. At 21 days, no patient required any analgesic medication.

Auriculothesis was first developed by Dr Paul Nogier. In contrast to acupuncture, scientific auriculothesis is neurophysiology based. In this study the ear points were defined using the most recent international nomenclature.

Conclusions
1. This preliminary study suggest that Auriculothesis may represent an effective complementary approach to the use of peripheral nerve blocks for the perioperative management of pain
2. Further investigation are required to confirm these initial finding.

REFERENCES
WHO?
DIPLÔME INTERUNIVERSITAIRE
D’AURICULOThÉRAPIE SCIENTIFIQUE
(PARIS-STRASBOURG)
WHY?
ADVANTAGES OF NOT HAVING TO USE PAIN DRUGS

- No opiate dependency
- Decrease CRPS
- Better sleep and decrease stress
- Faster recovery

1970’s:
PCA opioids gold standard for postoperative pain

*Problem: recent multimodal approach, 13% patients become addicted to opioids following surgery*


USA: 7000 death/y due to opioids

FRANCE 4 death/week due to opioids
IT IS POSSIBLE TO PERFORM SURGICAL INTERVENTIONS WITHOUT USE OF OPIOIDS
RESEARCH STUDIES INTO AURICULOTHERAPY PAIN MANAGEMENT

CONDUCTED BY Pr. CHELLY

2017 - 19: Auriculotherapy recently proven to be effective alternative to opioids
MY EXPERIENCE
38 patients:
  19 stimulated (group AT)
  19 placebo (group P)
Control group:
  30 patients

Randomized
Double blind
Control group
Cryopuncture (5 points)
RESULTS

Significant difference

Pain level D1 \((p < 0.05)\)
Pain level D2 \((p < 0.01)\)
Pain level D1-D3 \((p < 0.03)\)

AREA UNDER THE CURVE
RESULTS

Significant difference AREA UNDER THE CURVE

VAS D1-D3 (p < 0.05)

AT 0.82  P 1.86  T 3.5

Opioids D1-D3 (p < 0.05)

AT 1  P 1.84  T 4.5
<table>
<thead>
<tr>
<th>ARTHRITIS WITHOUT SURGERY</th>
<th>14 PATIENTS  ALL STAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 failures – STAGE 4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AT AVE 2,3 SESSIONS</th>
<th>3 MONTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAS AVE PRE AT</td>
<td>6,95/10 WITH OPIOIDS</td>
</tr>
<tr>
<td>VAS AVE POST AT</td>
<td>3,55/10 WITHOUT OPIOIDS</td>
</tr>
</tbody>
</table>
## Arthritis Without Surgery

<table>
<thead>
<tr>
<th>Joint</th>
<th>Number</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIP</td>
<td>5</td>
<td>1-3</td>
</tr>
<tr>
<td>PID</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CMC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carpus</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Treatment and Outcome

- **Average Sessions:** 2-3
- **Average Pre-Treatment VAS:** 6.67/10 with opioids
- **Average Post-Treatment VAS:** 1.43/10 without opioids

**Duration of Observation:** 3 months
<table>
<thead>
<tr>
<th>TENDINITIS WITHOUT SURGERY</th>
<th>5 PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 De Quervain</td>
</tr>
<tr>
<td></td>
<td>1 Flexor tendons</td>
</tr>
<tr>
<td></td>
<td>1 ECU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AT AVE 1,6 SESSIONS</th>
<th>3 MONTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAS AVE PRE AT</td>
<td>6,4/10 WITH OPIOIDS</td>
</tr>
<tr>
<td>VAS AVE POST AT</td>
<td>3/10 WITHOUT OPIOIDS</td>
</tr>
<tr>
<td>AT AVE 2,2 SESSIONS</td>
<td>3 MONTH</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
</tr>
<tr>
<td>VAS AVE PRE AT</td>
<td>7,5/10 WITH OPIOIDS</td>
</tr>
<tr>
<td>VAS AVE POST AT</td>
<td>3,17/10 WITHOUT OPIOIDS</td>
</tr>
</tbody>
</table>

12 PATIENTS
10 neuromas
  6 median nerve
  2 ulnar nerve
2 PION
2 failures: 1 fibromyalgia
1 nervous breakdown
PRE OP
CMC
ARTHROPLASTY

5 PATIENTS
AT 1 SESSION  1-3 DAYS PRE OP
VAS AVE D1-D3  0,6/10
NB OPOIDS AVE D1-D3  1
DISCUSSION

Auriculotherapy / carpal tunnel surgery

Decrease significantly pain D1-3 post op

AT > P >> C

Decrease using Opioids > 50%

Decrease risk of CRPC (chelly 2017)
AURICULOTHERAPY
Proven effective in low level pain

... BUT HOW FAR IT CAN BE TAKEN?

TODAY: SURGERY that involve low level pain

TOMORROW: more intense pain situations
IMAGINE THE BENEFITS

Not having

- to use pain drugs
- reducing complications in surgical practice.

Usefull to prevent stress before surgery
Welcome to the new world of peri-operative pain management