The Management of Temporomandibular Joint Dysfunction [TMJD] with Acupuncture

Tutor: Jennie Longbottom MSc MMED FCSP BSc MBAcC

Ultrasound scanning provided by: Mark Maybury, MSc BSc [Hons.] PGD Biomech MCSP

10 M-Level APEL Points available
Introduction

This is a cutting edge course aimed primarily at those Physiotherapists working in the area of Temporomandibular joint dysfunction [TMJD] and face pain. The course is accredited to the University of Hertfordshire [UH] as a training course and requires the submission of a 1,500-word case study for successful completion of the course. 10 M-Level Points are available on successful completion of the course, and registration with UH.

Part I

Tutor: Jennie Longbottom MSc MMEd BSc FCSP MBAcC

Jennie is an accredited ATCHP tutor and is director of Acupuncture, Learning and Integrated Educational Development Limited [ALIED], a postgraduate Physiotherapy and Acupuncture teaching school. She is editor of the book Acupuncture in Manual Therapy by Elsevier Science, author of the Trigger Point DVD for myofascial pain produced by the Journal of Chinese Medicine and is an international speaker on the use of Acupuncture integrated into Physiotherapy practice.

Aims

The primary aim of Part I of this course is to integrate the expertise of the Association of Chartered Physiotherapists in Temporomandibular Dysfunction [ACPTMJD] with the clinical expertise of Acupuncture intervention, for the management and alleviation of symptoms within TMJD.

This is a purpose written course for students who have a clinical and research interest in TMJD and who have successfully completed Foundation Acupuncture training standards. The course will utilise three separate, but integrated approaches, using evidence based Acupuncture models to:

- manage TMJD symptoms,
- restore function, and
- facilitate effective rehabilitation.

Part II

Jennie Longbottom and Mark Maybury MSc BSc PGD Biomech MCSP.

Mark combines his extensive knowledge and expertise within diagnostic ultrasound scanning for musculo-skeletal dysfunction with his Acupuncture skills for trigger point deactivation and myofascial pain management. Mark has extensive teaching and clinical expertise in the area of biomechanics, neuromuscular health care and medical imaging. The combination of Mark’s anatomical and imaging knowledge with Jennie’s clinical application of needling skills will enhance students’ knowledge and clinical application.

Aims

Part II of the course will involve the use of trigger point deactivation for the management of myofascial pain, using trigger point Acupuncture techniques. This course will be unique, offering students the ability to:

- Use the diagnostic scanner to identify the structures under the needle,
- Enhance anatomy knowledge of the face and cervical spine,
- Enhance safety skills with detailed identification of needle techniques and vital structures under the needle,
- Achieve safe, effective trigger point deactivation of the head, neck and upper quadrant for the management of myofascial pain in TMJD.
Learning objectives

The course will:

- enhance students’ understanding of differing pain presentations involved in TMJD,
- enhance clinical reasoning in the identification of differing tissue involvement and Acupuncture intervention,
- enhance anatomical skills in identification of tissues under the ultrasound scanner,
- facilitate effective, evidence based management of TMJD using appropriate Acupuncture intervention involving:
  - treatment of inflammation and acute nociception using segmental and supraspinal western Acupuncture models
  - addressing sympathetically maintained pain and central sensitisation using traditional Chinese Acupuncture, electro-Acupuncture [EA] and auricular Acupuncture [AA] models
  - demonstrating myofascial pain and trigger point deactivation.

Learning outcomes

Following this course, students will have a full understanding of:

1. The pathophysiology of acute, chronic and myofascial pain presentation.
2. A clinical reasoning approach to Acupuncture models for the effective management of differing pain presentation and tissue dysfunction.
3. A basic understanding of diagnostic ultrasound scanning techniques.
4. Safe identification of anatomical structures in muscle, tendon, fascia, nerve and blood vessels under the scanner probe.
5. Clinical reasoning in the identification of differing tissue involvement and Acupuncture models acute nociception and inflammation, central sensitisation and myofascial pain.
7. Practical skills in effective, evidenced based Acupuncture management for TMJD.
8. Practical skills in safe, effective needling for the face, cervical spine and upper quadrant for TMJD.
9. Enhanced needling skills in the management of myofascial pain with trigger point needling.

Indicative content

The course will be delivered using the following methods

- Lectures, with PowerPoint presentation and student manuals
- Practical needling demonstration and participation
- Practical scanning demonstration and participation
- Clinical reasoning of case scenarios in action groups
- Review of available evidence for Acupuncture within TMJD

Assessment Criteria

Submission of an academic case study of 1,500 words, within 6 weeks of course completion. The criteria for the case study content will be discussed throughout the course with direction, management and presentation advice throughout.
CASE STUDY SUBMISSION BY STUDENTS

Case Study Marking Process
The Case Study constitutes the final academic assessment for students undertaking the ALIED Foundation Acupuncture Course.

For those students undertaking Masters’ credits with the University of Hertfordshire [UH], the Case Study will be marked by the ALIED tutor, but moderated by the University to ensure transparency and fairness. As a result, these students’ results will be delayed by the process of ratification by UH Examining Board, which meets three times a year.

For those students not taking Masters’ credits the marking is identical, but is performed solely by the tutor teaching the course and by two tutors in the case of borderline pass or fail.

Case Study Requirements
1. The Case Study should be written using Microsoft™ Word and saved in Word 97-2000 format as a .doc file.
2. The front page of the Case Study must contain:
   a. Your name
   b. Your address
   c. Course venue and date
   d. UH student number
   e. Word Count [excluding tables and references]
3. The header on each page of the Case Study should contain your name, UH student number and course venue,
4. The Case Study
   a. word limit is 1,500 +/- 10%;
      i. Word counts differing from 1,500 will be penalised @ 10% loss of marks per 100 words
      ii. Tables, charts and graphs ARE COUNTED AS WORDS
      iii. References in the text and at the end are NOT COUNTED AS WORDS
   a. is evaluated at Masters’ level and as such should demonstrate:
      iv. Clinical reasoning
      v. Research analysis
      vi. A logical progress of treatment
      vii. An analysis of the procedures adopted
      viii. Evidence based research to support acupuncture protocols, point choice, pain modulation
      ix. Extra marks are awarded for:
         1. Original concepts
         2. In depth analysis of the research
         3. In depth analysis of the condition
         4. In depth analysis of best practice

1 Versions of MS Word from Word 97 can save in this format. Any students having difficulty should contact ALIED.
Case Study Submission Process

The process of Case Study submission is defined below:

1. The Course tutor will announce on the course the date by which the Case Study should be submitted to the tutor - the Set Date,

2. The completed Case Study shall be submitted to the Course Tutor by E-Mail in sufficient time for it to be received by the Set Date,

3. If the student considers that he or she has experienced extenuating circumstances that would justify an extension to the Set Date, he or she shall notify the Course Tutor not less than seven days before the Set Date. Unless the Course Tutor has agreed an extension to the Set Date, late submissions will result in a 10% loss of final marks. Submissions received more than 2 days after the Set Date will not be marked and will be considered as failed.

4. When the Course Tutor receives the Case Study, an E-Mail receipt will be sent. If no E-Mail receipt is received by the student within 48 hours of sending the Case Study, the student should contact the tutor to verify receipt.

Resubmissions

1. Subject to agreement by the tutor, students are permitted three attempts at the Case Study, to be submitted at dates pre-arranged with the tutor,

2. Failure to achieve a pass after three submissions will result in the student being asked to re-take the Foundation Course.

Support

1. Every effort will be made at all times to assist students who are finding difficulty,

2. Students with learning difficulties are required to inform the tutor before the first Case Study submission in order that adequate allowances can be made.

GOOD LUCK
## TIMETABLE: DAY ONE

<table>
<thead>
<tr>
<th>Time</th>
<th>Subject</th>
<th>Learning Outcomes</th>
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</thead>
<tbody>
<tr>
<td>8.45</td>
<td>Registration and coffee</td>
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<tr>
<td>9.15</td>
<td>Welcome and introduction</td>
<td></td>
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</tbody>
</table>
| 9.30  | Revision of pain physiology
Nociception & Inflammation                                                 | 1,5 & 6           |
| 10.30 | **COFFEE**                                                              | **COFFEE**        |
| 11.00 | Revision of neurophysiology of Central Sensitisation                    | 8                 |
| 11.30 | Clinical reasoning in Acupuncture
Western Model
Clinical application                                                    | 8                 |
| 12.15 | TCM model
Clinical application                                                  | 8                 |
| 1.00  | **LUNCH**                                                               | **LUNCH**         |
| 2.00  | Practical application of Acupuncture to pain presentation
Meridians
DNIC
EA
AA                                           | 6 & 7             |
<p>| 3.00  | <strong>TEA</strong>                                                                 | <strong>TEA</strong>           |
| 3.30  | Clinical scenarios and point application                                | 6 &amp; 8             |
| 4.30  | <strong>CLOSE</strong>                                                               | <strong>CLOSE</strong>         |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Subject</th>
<th>Learning Outcomes</th>
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<tr>
<td>8.45</td>
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<td>9.15</td>
<td>Welcome to Mark</td>
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<td>Introduction to the technology of scanning</td>
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<td>Basic physics</td>
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<td>Blood vessels</td>
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<td>11.30</td>
<td>Pathophysiology of trigger points and facial dysfunction</td>
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<td>Recent research evidence</td>
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<td>12.15</td>
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<td>Masseter</td>
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<td>Temporalis</td>
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<tr>
<td>1.00</td>
<td>LUNCH</td>
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<tr>
<td>2.00</td>
<td>Trigger point deactivation of:</td>
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<td>Scalene</td>
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<td>Levator Scapula</td>
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<tr>
<td>3.00</td>
<td>TEA</td>
<td>TEA</td>
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<tr>
<td>3.30</td>
<td>Clinical scenarios and point application</td>
<td>2</td>
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<tr>
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<td>Discussion of the evidence</td>
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<tr>
<td>4.30</td>
<td>EVALUATION</td>
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PRE COURSE INFORMATION

Introduction

The Temporomandibular joint [TMJ] is a source of head and facial pain; evidence suggests that the majority of patients improve with non-intervention [Toller 1973; Sato 1998; 1999]. The term Temporomandibular disorder [TMJD] is used to describe a variety of medical and dental conditions relating to TMJ dysfunction [TMJD], such as true pathology of the TMJ, involvement of the central nervous system [CNS] and involvement of the muscles of mastication.

Four categories of TMJD are recognized:

- A myofascial component of the jaw, neck and shoulder
- An internal mechanical derangement of the joint
- Degenerative joint disease
- An inflammatory component

This course is NOT SUITABLE for students who may be pregnant, or are actively trying to become pregnant, because of the copious needle application through the course.

Aims of the course

This course is designed for those members of the ACPTMJD who are actively engaged in clinical management of TMJD. All students will be required to have undertaken Foundation Acupuncture training and maintained adequate CPD in Acupuncture and Physiotherapy since taking the course. All students are required to complete a health screening consent form and will be required to give and receive Acupuncture needling.

This course will concentrate on the use of Acupuncture in the management of pain and tissue dysfunction in TMJD. The incorporation of recent research and evidenced based clinical reasoning into the management of fascial pain with the following components:

- Inflammation
- Nociception
- Central sensitisation
- Anxiety and stress
- Myofascial pain

will be discussed both in theoretical and practical needling skills.

The course will present the case for Western Acupuncture using:-

- Segmental dorsal horn inhibition [pain gate]
- Descending noxious inhibitory control [DNIC]
- Sympathetically maintained pain [SMP]
- Myofascial trigger point deactivation [MfTrPt]

A Traditional Chinese Acupuncture [TCA] model will be presented to deal with emotional, anxiety and central sensitisation, incorporating electro-Acupuncture [EA] and auricular Acupuncture [AA] for parasympathetic nervous system [PNS] activation.

A presentation of recent research and available research will be reviewed and analysed to support interventions.
Suggested pre-course reading

The DVD “Myofascial Pain Management with Trigger Points” will be on sale on the course priced £30.

Suggested further reading