A CRITICAL PERSPECTIVE
OF HOMOEOPATHY
AND ITS APPLICATION IN
SPORTS MEDICINE

A SUMMARY OF THE ORIGINAL PAPER

Compiled and Presented by
Dr. Robin Sandell B.Sc. MB Ch.B. B.Sc.(Med) (Hons) Sports Science
in Johannesburg, Durban and Cape Town

BIO PATHICA LTD
P.O. BOX 217
ASHFORD KENT
TN23 6ZU
TEL: 01233 636678
FAX: 01233 638380
CONTENTS

The Speaker.................................................................................................................3

A  HOMOEOPATHY - A CRITICAL PERSPECTIVE.................4
   Introduction...............................................................................................................4
   Clinical Trials...........................................................................................................5
   Laboratory Studies...................................................................................................5
   Nuclear Magnetic Resonance studies.................................................................6
   Solvent as Information Carrier.............................................................................6
   Process of Succussion............................................................................................7

B  COMBINATION HOMOEOPATHIC MEDICATIONS
   IN SPORTS MEDICINE.........................................................................................8
   Combination Remedies.........................................................................................9
   Selected Remedies and their Application..........................................................10
   General Rules for use of -Heel Medicines.........................................................11
   Suggested further reading....................................................................................12
The Speaker

Dr. Robin Sandell is a medical Doctor who qualified with a B.Sc. and an MB Ch.B. at the University of Cape Town; and a B.Sc. (Med) (Hons) Sports Science.

Dr. Sandell has worked variously as Senior House Surgeon (Edendale Hospital), in group general practice, as sessional anaesthetic staff member (Victoria Hospital), and until recently in private practice confined to Sports Medicine.

Along with his medical training Dr. Sandell's experience in mountaineering (he led the Peruvian Earthquake Relief Expedition of South Africa to the disaster area of the Callejon de Huaylas, Peru, 1970) and distance running (having completed 3 Comrades and 12 Two Oceans Marathons) has more than qualified him to compile numerous papers relating to sports medicine. Amongst these includes a research paper on Collapse following Ultra-Marathon Road Races read at the FIMS XXIII World Congress of Sports Medicines, Brisbane, Australia, September 1986.
A  HOMOEOPATHY - A CRITICAL PERSPECTIVE

Introduction

Homoeopathy makes a number of claims which are, prima facie, in conflict with existing scientific models.

This paper will demonstrate the need for new models with which to measure the attested efficacy of homoeopathic remedies.

In order to understand the processes involved in homoeopathic dilution, a paradigm shift in thinking is required. One must move away from the two dimensional chemical model to a three dimensional physical model of the structure of the homoeopathic solvent. We are moving from chemistry to quantum physics.

The following postulates are made:

- that infinitesimal (homoeopathic) dilutions are capable of exerting an effect on living systems - this refers to the First Law of Homoeopathy: The Law of Similars.

- that the process of succussion (violent agitation) has an energy enhancing effect on succeeding dilutions.

- that increasing dilution with succussion increases therapeutic effect - the Second Law of Homoeopathy.

In the second section we review the application of selected combination Homoeopathic medications in sports medicine.
Clinical Trials

In a criteria-based meta-analysis, Kleinjen et al reviewed 107 controlled homoeopathic trials. Scoring was based on pre-defined criteria of good methodology. Of 105 trials with interpretable results, 81 indicated positive results whereas in 24 trials no positive effects of homoeopathy could be found. The authors concluded that further evaluation of homoeopathy was indicated but only by means of well-controlled trials.

In double-blind controlled studies statistically significant results for homoeopathy were demonstrated by the following authors:

<table>
<thead>
<tr>
<th>Authors</th>
<th>Condition</th>
<th>Homoeopathic Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reilly et al</td>
<td>Allergic rhinitis</td>
<td>Grass Pollens</td>
</tr>
<tr>
<td>Brigo &amp; Serpelloni</td>
<td>Migraine</td>
<td>Choice of 8 medications*</td>
</tr>
<tr>
<td>Ferley et al</td>
<td>Influenza</td>
<td>Oscillococcinum</td>
</tr>
<tr>
<td>Fisher et al</td>
<td>Fibromyalgia</td>
<td>Rhus tox</td>
</tr>
<tr>
<td>Gibson et al</td>
<td>Rheumatoid arthritis</td>
<td>Various*</td>
</tr>
<tr>
<td>Bohmer &amp; Ambrus</td>
<td>Inflammation</td>
<td>Traumeel ®</td>
</tr>
</tbody>
</table>

It is important to note that homoeopathic trials are patient-driven, not substance driven as in conventional pharmacological trials - i.e. the medication is individualised to the patient. Hence, different patients may require different medications when being treated for the same medical condition.

Laboratory Studies

Various studies have been done on living systems using both high and low homoeopathic dilutions. Dilutions across the range were found to be active (Cazin et al). Most interesting, however, was that some potencies had a significant inhibitory effect while others had a stimulating effect. Two particularly worthwhile studies are noted;

<table>
<thead>
<tr>
<th>Author</th>
<th>Condition</th>
<th>Homoeopathic Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benveniste et al</td>
<td>Basophil degranulation</td>
<td>Anti-IgE antiserum</td>
</tr>
<tr>
<td>Cazin et al</td>
<td>Arsenic poisoning in rats</td>
<td>Arsenous anhydride</td>
</tr>
</tbody>
</table>
Nuclear Magnetic Resonance Studies

Many N.M.R. studies have demonstrated that the ultra-diluted homoeopathic solution is different from a control solution of ethanol and water.

The most recent and compelling study by Sachs in 1993 demonstrated N.M.R. spectroscopic differences between an ethyl alcohol/water control solution and 16 different dilutions of sulphur, as with D60 dilutions of calcarea carbonica, lycopodium, lachesis, sepia, arnica, natrium muriaticum and nux vomica.

The Solvent as Information Carrier

If it is accepted that the clinical and laboratory studies provide evidence that infinitesimal (homoeopathic) dilutions are capable of exerting an effect on living systems, by what means is their biological effect conveyed?

In 1965 Barnard, a London physicist, put forward the hypothesis that, as the molecules of homoeopathic solute became leached out of the solution during the dilution process, the solvent continued to carry the informational content of the original solute.

This represented a shift from a two dimensional chemical view to a three dimensional physical view of the structure of the solutions.

There are several mechanisms in physics which could explain this phenomenon:
- hydrogen-bonded water polymer formation
- polarisation of water molecules
- increased atomic vibrational energy levels
- water shells with specific shapes and properties acting as memory banks
- some positional correlates of stable isotope working as "templates" of the original solute

Further research is needed to establish the precise role of these mechanisms in physics to explain this phenomenon.
The Process of Succussion

(Violent agitation between dilutions)

Without succussion, serial dilution leads to a linear fading effect in potency of the homoeopathic medication.

With succussion, homoeopathic potency is not only retained during dilution but demonstrates peaks of activity at certain dilutions. It is postulated that the energy introduced to the systems by vigorous shaking leads to the formation and subsequent breakdown of water polymers, resulting in peaks of activity.

The kinetic energy required for the formation and replication of polymers in the solvent could be introduced in three ways:

* By splashing water against a surface, when a negative charge is formed around the drops while the water itself becomes electropositive.

* By forcing air through a solution, producing a similar energy exchange.

* By producing small bubbles in a liquid and compressing them suddenly to induce severe temperature changes (of several thousand degrees C). At these temperatures some water is ionised and is then available for chemical or physical interactions when the bubbles burst. It is this phenomenon which accounts for the excessive corrosion around ships' propellers and for the presence of traces of nitric acid in pure water passing through small apertures at high pressure.

During the process of succussion all three mechanisms are involved.
B  COMBINATION HOMOEOPATHIC MEDICATIONS IN SPORTS MEDICINES.

In this section we consider the application and benefits of using combination homoeopathic remedies both for sport injuries and improved sport performance.

Combination Remedies

Unlike simplexes, combination medications are ideally suited to the general practitioner venturing into Homoeopathy for the first time. The use of simplexes, although valuable, is time consuming and requires an intimate knowledge of homoeopathy. Combination remedies are indication-orientated and may be prescribed on the basis of medical diagnoses, thereby facilitating easy integration of biological medicines into an existing allopathic practice.

Selected Remedies and their Application

The possible adverse effects of many analgesics, non-steroidal anti-inflammatory agents, skeletal muscle relaxants, cold and influenza preparations, anti-histamines, psychotropic and gastro-intestinal medications are well documented in relation to sporting activity. In many instances combination homoeopathic medications could be substituted for these drugs. Side-effects and contra-indications are rare and there is no interaction between ingredients. These medications contain no banned substances and may safely be used during competition.

Combination homoeopathic medications which could be useful in Sports Medicine include:
TRAUMEEL - S (tablets/drops/injection/ointment)

**Main Indications:**
- soft tissue injuries and inflammatory processes
- alleviation of muscle pain and stiffness in endurance sporting events (see below)
- wound healing

In a randomised double-blind controlled trial, Zell et al showed Traumeel ointment to be statistically more effective than placebo in the treatment of acute sprains of the ankle.

**Suggested Schedule for Marathon Runners**
(Adults)

The following schedules have been found to reduce pain and stiffness during the race and improve the recovery time of the competing athlete.
Either tablets or injections can be used.

**TRAUMEEL - S TABLETS**

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-competition day:</td>
<td>8 tablets (1 every 1 1/2 hrs.) The tablets are always sucked or dissolved under the tongue.</td>
</tr>
<tr>
<td>Competition day:</td>
<td>Pre-event: 6 tablets (1 every 15 min. if an early start)</td>
</tr>
<tr>
<td></td>
<td>Post-event: 3 tablets (1 every 3 hrs.)</td>
</tr>
<tr>
<td>Post-competition days:</td>
<td>4 tablets daily (1 every 3 hrs.) For 3-4 days.</td>
</tr>
</tbody>
</table>

**OR**

**TRAUMEEL - S INJECTION**

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-competition day:</td>
<td>1 ampoule (2.2ml, intramuscular)</td>
</tr>
<tr>
<td>Competition day:</td>
<td>1 ampoule on rising</td>
</tr>
<tr>
<td>Post-competition days:</td>
<td>1 ampoule daily for 3-4 days.</td>
</tr>
</tbody>
</table>
Selected Remedies and their Application cont.

2 ZEEL (tablets/injection/ointment)
   Main Indications:
   - early arthroses
   - peri-articular inflammatory processes
   There is some overlap with Traumeel as both contain Arnica.

3 SPASCUPREEL (tablets/injection/suppositories)
   Main Indications:
   - spasm of smooth AND striated muscle

4 COENZYME COMPOSITUM (injection)
   Main Indications:
   - following prolonged illness
   - following "burn-out"

5 GRIPP-HEEL (tablets/injection)
   Main Indications:
   - influenza
   - influenza-like illnesses

6 DIARRHEEL (tablets)
   Main Indications:
   - acute and chronic diarrhoea

7 NERVOHEEL (tablets)
   Main Indications:
   - anxiety states, e.g. before competition
   - exogenous and endogenous depression (including menopausal)
General Rules for use of -Heel Medications

ANTIDOTES - only camphor

AGGRAVATION OF SYMPTOMS
This may occur for 1 - 2 days due to the release of toxins. It indicates that a healing reaction has commenced.

DOSAGE IN CHILDREN
Unless otherwise instructed:
0 - 2 years: 1/4 adult dose (i.e. 2-3 drops or 1/4 tablet)
2 - 6 years: 1/2 adult dose (i.e. 5 drops or 1/2 tablet)
over 6 years: full adult dose (i.e. usually 10 drops/1 tablet)

HOW TO TAKE MEDICATION
Always by buccal absorption. Suck the tablets or place the drops (which contain alcohol) in a little water and hold in the mouth. Stomach acid destroys homoeopathic tablets and liquids.

WHEN TO DOSE
Not within 15-20 minutes of meals or brushing teeth. Mint or menthol in toothpaste cause buccal vasoconstriction and impairs absorption.

FREQUENCY OF DOSING
The more acute and severe the symptoms, the more frequent the dose. In acute illness doses may be given every 10-15 minutes initially. Reduce the frequency as symptoms abate. In low-grade illnesses, dose two or three times daily as a rule.

AMPOULES
These may be given I.M., S.C., I.V. Being a highly purified form of the drops, all -Heel ampoules may also be taken by buccal absorption. Place the contents in 1/3 glass of water and sip every 15 - 30 minutes.
Suggested Further Reading
