THE HOMOEOPATHIC TREATMENT OF CHRONIC SINUSITIS

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I, MONIKA SENGPIEHL, DO HEREBY DECLARE THAT THIS DISSERTATION REPRESENTS MY OWN WORK BOTH IN CONCEPTION AND IN EXECUTION.
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ABSTRACT

The purpose of this study was to evaluate the reaction of homoeopathic Luffa Operculata and a combination of Kalium Bichromicum and Cinnabaris on chronic sinusitis patients, with reference to the patients perception to the treatment and the physical appearance of the nasal mucosa during treatment in order to determine the effectiveness of the two modes of treatment.

Forty patients were randomly selected and divided into two experimental groups. The study was double blind. The one group received Luffa Operculata and the other group received a combination of Kalium Bichromicum and Cinnabaris.

Questionnaires were answered before and during the four month treatment period in order to assess the patients perception of the treatment. The physical appearance of the nasal mucosa was inspected on a monthly basis using a nasal speculum.

Eight patients dropped out over the four month period. All data obtained from the questionnaires was depicted on spreadsheets and subsequently analysed using frequency tables, cross tabulation, Mann-Whitney-U-Test and the Wilcoxon Signed Rank Test.

The results showed that both modes of treatment were equally effective in reducing the sinusitis headaches, with Luffa Operculata having a 44.1% decrease and Kalium Bichromicum and Cinnabaris having a 37.3% decrease. The Mann-Whitney-U-Test was done within each group and showed values of P=0.033 and P=0.31 respectively, thereby
indicating a statistically significant difference. There was no significant difference between the groups. However Luffa Operculata's results were more positive with respect to post-nasal drip, facial swelling, nasal mucosal swelling and nasal mucosal colour. The most dramatic difference in results occurred in the analysis of the fatigue data, where Luffa Operculata had a 44% decrease and Kalium Bichromicum and Cinnabaris only had a 6% decrease.

In conclusion this study showed that Luffa Operculata is a more effective mode of treatment for chronic sinusitis than a combination of Kalium Bichromicum and Cinnabaris.
UITREKSEL

Die doel van hierdie studie was om die aksie van homeopatiese Luffa operculata en 'n kombinasie van Kalium bichromicum en Cinnabar is op chroniese sinusitis lyers te evalueer, met betrekking tot die pasiënte se persepsie ten op sigte van die behandeling en die fisiese voorkoms van die nasale slymvlies gedurende behandeling ten doel om die effektiwiteit van die twee behandeling metodes te bepaal.

Veertig pasiënte is gekies en ewekansig in twee groepe verdeel. Die een groep het Luffa operculata en die ander 'n kombinasie van Kalium bichromicum en Cinnabar is gekry.

Vraelyste is deur die pasiënte voor en gedurende die vier maande lange behandeling periode voltooi ten einde die pasiënte se persepsie van die behandeling te bepaal. Die fisiese voorkoms van die nasale slymvlies is maandeliks ondersoek deur middel van 'n spekulum.

Gedurende die vier maande het agt pasiënte onttrek. Die data wat deur middel van die vraelyste ingevoer is, is voorgestel op 'n "spreadsheet" en daarna ontleed deur middel van frekwensie tabelle, kruis tabellering, die Mann-Whitney-U-toets en die Wilcoxon toets.
Die resultate toon dat beide metodes van behandeling ewe effektief was in die behandeling van sinus hoofpyn, met Luffa operculata wat 'n 41.1% afname en Kalium bichromicum en Cinnabaris wat 'n 37.3% afname getoon het. Die Mann-Whitney-U-toets is vir elke groep gedoen en die waardes was P=0.033 en P=0.31 onderskeidelik, wat 'n statisties beduidende verskil aandui. Daar was geen beduidende verskil tussen die groepe nie.

Nogtans was Luffa operculata se resultate meer positief met verwysing tot post nasale drip, gesigs swelling, nasale swelling en nasale slymvlies kleur.

Die mees dramatiese verskille het voorgekom in die ontleiding van die data in verband met graad van moegheid, waar Luffa operculata 'n 44% afname en Kalium bichromicum en Cinnabaris net 'n 6% afname getoon het.

Daar is tot die slotsom gekom dat Luffa operculata 'n meer effektiewe behandelings metode vir chroniese sinusitis is as 'n kombinasie van Kalium bichromicum en Cinnabaris.
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LIST OF ABBREVIATIONS

Kali Bich : Kalium Bichromicum and Cinnabaris
Luffa : Luffa Operculata
Month 1 : Initial Consultation ie. before treatment
Month 5 : Final Consultation ie. after 4 months of treatment
INTRODUCTION.

Over the last decade, respiratory problems have become more prevalent in our society, amongst these problems there is the ever persistent chronic sinusitis. Chronic Sinusitis is an inflammation of the paranasal sinuses due to viral, bacterial and fungal infections or allergic reactions (Slavin, 1988).

The U.S Department of health and human services reported in 1981 that more than 31 million persons have chronic sinusitis, considerably more than have arthritis (27 million) or hypertension (25.5 million). In Great Britain the department of health and social security estimates that one-half million working days are lost in that country each year from sinusitis. (Slavin, 1988.)

Chronic sinusitis sufferers have varying combinations of the following symptoms, pus discharging into the nose, a post-nasal drip, epistaxis, abnormalities of smell, headaches and other more serious symptoms if the infection spreads to the lower respiratory tract or the digestive tract (Godley, 1992).

There can be no improvement in these symptoms until this vicious circle is broken by therapeutic measures. Chronic sinusitis is conventionally treated by giving a regime of antibiotics for 10 to 12 days. (Slavin, 1988).
Chronic sinusitis is often unresponsive to the antibiotics, at which time surgery is usually indicated (Huerter, 1992). An invasive treatment which the findings of this study could prevent.

Classical medicines are coercive and use an approach involving destruction, inhibition or substitution, whereas homoeopathic remedies act together with the body's reactions to stimulate the defence mechanism (Jouanny, 1991). There is a definite gap in the homoeopathic studies on chronic sinusitis. There is much literature about the remedies used to treat sinusitis however, very few controllable studies on the subject exist. This study will add valuable information to the pool of knowledge. I intend demonstrating that homoeopathic treatment can be used to treat chronic sinusitis patients, taking into account the patient's perception of the treatment and the physical changes in the appearance of the nasal mucosa after treatment.

Homoeopathic treatment would not be invasive, thereby overcoming the discomfort experienced by the patient undergoing sinus surgery. Finding a treatment for chronic sinusitis would improve productivity by reducing the amount of working days lost. Homoeopathic treatment is always non-toxic due to the successive dilutions and therefore there is never any risk of overdose (Jouanny, 1991).
CHAPTER ONE

1. THE PROBLEM STATEMENT AND ITS SETTING.

1.1 Problem Statement.

The purpose of this investigation is to evaluate the reaction of a homoeopathic combination of Kalium Bichromicum and Cinnabaris, and Luffa Opeculata on chronic sinusitis patients with reference to the patients response to the treatment and the physical appearance of the nasal mucosa during treatment in order to determine the effectiveness of the two modes of homoeopathic treatment on chronic sinusitis.

1.2 The Subproblems.

1.2.1 Subproblem 1.

The first subproblem is to evaluate the reaction of a combination of homoeopathic Kalium Bichromicum and Cinnabaris on chronic sinusitis patients with reference to the patients response and the physical appearance of the nasal mucosa in order to determine the effectiveness of the treatment.
1.2.2 Subproblem 2.

The second subproblem is to evaluate the reaction of Luffa Operculata on chronic sinusitis patients with reference to the patients response and the physical appearance of the nasal mucosa in order to determine the effectiveness of the treatment.

1.2.3 Subproblem 3.

The third subproblem is to integrate the results of subproblem one and subproblem two in order to determine which of these two modes of treatment is the most effective in the treatment of chronic sinusitis.

1.3 The Hypotheses.

1.3.1 Hypothesis 1.

The first hypothesis is that the patients perception of the treatment of chronic sinusitis and the physical changes in the nasal mucosa with a combination of Kalium Bichromicum and Cinnabaris will be positive.

1.3.2 Hypothesis 2.

The second hypothesis is that the patients perception of the treatment and the physical changes in the nasal mucosa with Luffa Operculata will be positive.
1.3.3 Hypothesis 3

The third hypothesis is that being treated with a combination of Kalium Bichromicum and Cinnabaris will be less effective than being treated with Luffa Operculata for chronic sinusitis.

1.4 The Delimitations

The study will not include:— sinusitis consequential to prediagnosed polyps, intra-sinus tumours or malformations.

It will also not include immunocompromised patients.

1.5 Assumptions.

The first assumption is that the patient is not a malingering.

The second assumption is that the medicine used in the study is prepared according to the specified standards and are taken correctly by the patients.

The third assumption is that the medicine will not be antidoted by strong smelling products, direct sunlight or contaminated at any stage during the study.
1.6 Conceptual Clarification.

Luffa Operculata:- This is an exotic plant which comes from Columbia and was introduced to Europe by W. Schwabe.

Patients response:- This will include the patients physical reaction to the treatment as well as the patients emotional and mental reactions to the treatment.

Kalium Bichromicum:- A remedy composed of potassium dichromate which has been found to have an elective action upon all the mucosa of the respiratory tract.

Cinnabaris:- A remedy made from mercury sulphate, also known as red sulphur with characteristic E.N.T symptoms, used homoeopathically in the treatment of sinusitis.

Physical findings:- This will include the colour of the nasal mucosa and the degree of swelling of the nasal mucosa as seen through a nasal speculum. This inspection will be performed by the researcher and the supervising physician.
CHAPTER TWO

THE REVIEW OF RELATED LITERATURE.

Introduction.

Chronic Sinusitis is an inflammation of the paranasal sinuses due to viral, bacterial and fungal infections or allergic reactions (Slavin, 1988). Over the last decade, chronic sinusitis has become more prevalent in our society. In 1981, 31 million persons had sinusitis in the States and one-half million working days are lost each year in Great Britain due to Chronic Sinusitis (Slavin, 1988).

Pathophysiology.

Anterior and posterior air cells expand into different portions of the skull as sinuses, which are mucosa-lined air pockets. The sinuses drain into the middle meatus of the nasal cavity. The function of the sinuses is not fully understood. It has been shown that the ciliated columnar epithelium moistens the inhaled air. The cilia, beating 1,000 times per minute transports the mucus through the ostium into the nasal cavity (Godley, 1992).

The mucus is there to capture foreign airborne particles and removes them from the inspired air. The sinuses also act as shock absorbers and impart resonance to the voice (Rachelefsky, 1989). The small complex anatomy hidden under the middle meatus in the nose is referred to as the osteomeatal unit and when this area is obstructed it can result in the ciliary function and the mucosal blanket function being
disturbed, resulting in the accumulation of mucous secretions and inflammation with subsequent bacterial contamination. This process is what occurs in chronic sinusitis. (Reilly, 1990.)

Etiology.

The majority of sinusitis is caused by viral upper respiratory tract infections and allergic rhinitis which is the most frequent co-existing disease with chronic sinusitis. (Huerter, 1992). Other allergies that could cause a sinusitis would be certain environmental irritants such as tobacco smoke or chemicals such as chlorine in the swimming pools.

The bacteria cultured from purulent sinusitis secretion was found to be similar to those found in otitis media. About 67-88% of those organisms found are anaerobic. (Josephson, 1991.)

Presentation.

The hallmark symptom of chronic sinusitis is a dull ache or pressure especially between or deep to the eyes. The headache occurs daily for weeks at a time and is aggravated by movement. On stooping the patient will feel as if their eyes would "pop out". The pain is therefore exacerbated by change in position, straining or changes in barometric pressure (flying, diving, elevators, and storms.). (Loch, 1990.)

The patient also commonly complains of thick pharyngeal secretions (postnasal-drip) and "popping ears" or otalgia. Fevers and rigors are reported in less than 65% of cases. (Loch, 1990.)

Other complaints occurring in chronic sinusitis include light nose bleeds, dental pain, intermittent mild facial swelling, halitosis, chronic cough and bronchitis. The nasal symptoms may be minimal or
absent. The cough usually occurs at night shortly after lying down and lasts for 1 to 2 hours and then resumes in the early morning again. (Godley, 1992.)

Fatigue is a characteristic complaint, commencing with lack of energy, concentration and productivity. Itchy eyes and recurrent sneezing will occur if the sinusitis is associated with an allergic rhinitis. (Godley, 1992).

There may be marked tenderness on palpation over the involved sinuses and dental tenderness can suggest maxillary sinus inflammation. (Godley, 1992).

There will be oedema of the eyelid and medial canthus of the eye. Physical examination shows erythema of the nasal mucosa, mucopurulent rhinorrhea and a post-nasal drip. Nasal drainage can vary, it can be absent or profuse. The colour may be clear, yellow or green and the consistency may vary from thin to thick. (Rachelefsky, 1989.)

Diagnostic Imaging.

Advances in diagnostic imaging have greatly enhanced our appreciation of the pathological changes that occur at all stages of sinusitis. The standard radiographic views (x-ray) are useful for identifying obvious acute sinusitis. They may however, due to the overlapping of tissue shadows, fail to identify pathology in roughly 20% of cases despite clear signs and symptoms. (Loch, 1990.)

In chronic or recurrent sinusitis, computerized tomography (CT-scan) is of greatest value. CT scanning provides detailed images of the medial maxillary sinus walls, the ethmoid sinuses and the sphenoidal sinuses. It is also used to obtain anatomical information for
preoperative surgical planning. CT scans are however very costly and must be used with consideration to the patients means. (Macleod, 1991.) There are no laboratory tests for diagnosing sinusitis. Raised white blood cells count or raised erythrocytic sedimentation rate are of little diagnostic value. (Godley, 1992.)

The findings of the CT scan must always be correlated with the clinical information, because some symptomatic patients have minimal findings on the CT scan, while others with nasal polyposis and tolerable symptoms have completely opacified sinuses. (Stammberger et al., 1988.) This study shall not include CT scanning as it costs anywhere between 800 and 1000 rand for one scan and as we will be treating a minimum of 30 patients it will be far too expensive.

Treatment.

Medical:- All treatment, whether medical or surgical, attempts to re-establish the normal ciliary transport of the mucosal secretions through the sinuses. (Loch, 1990).

Antibiotics, decongestants and nasal lavage are the most effective forms of treatment. When the chronic sinusitis does not respond to medical treatment, irrigation of the sinuses is indicated.
In the case of the maxillary sinuses they can irrigate through the nose via a sinus puncture catheter. The sphenoid and frontal sinuses require surgical drainage. (McConnel, 1988.)
Homoeopathic:- This treatment usually adheres to the simillimum principles and therefore many different remedies may be indicated for different patients. Remedies that appear prevalent to the treatment are Luffa Operculata, Kalium Bichromicum, Cinnabar, Pyrogenium and a few more.

All have been successful in their treatment of the condition. (Srinivascon, 1990.)

Luffa Operculata has been used by the natives of central American countries in the form of a diluted infusion in the treatment of sinusitis. It causes drainage of the sinuses and after repeated use it decreases the congestion of the mucous membranes of the sinuses. An overdose was shown to cause an atrophy of the sinus membranes, especially when used locally (sniffed up the nose).

Luffa Operculata was introduced at the International Homoeopathic League conference in 1962 by Wilmar Schwabe and Martin Stübler. Schwabe (1962) did 90 provings on cases of frontal and maxillary sinusitis. Nine of the 15 acute cases were cured and the chronic sinusitis patients reacted even better. Over 80% reported drainage of the sinuses after only a few days of taking the medication. It also showed that out of the 8 chronic rhinitis patients treated 6 reported improvement after only 4 weeks. (Raeside, 1965.)

Luffa Operculata alleviates certain symptomatology such as physical and corporal fatigue, frontal head pain, yellow or pale nasal secretions and acute or chronic inflammation of the mucous membranes in the nasal cavity. (Julian, 1979).
Dosages found to be effective were D6 through to D12. Initially an aggravation of the sinus headache may be found due to the increase in nasal drainage. (Wiesenauer et al., 1989.)

Kalium Bichromicum has an affinity to all mucous membranes and is indicated with discharges that are thick, viscus, sticky and yellow or yellow-green. The post-nasal drip which irritates the throat is also indicative of this remedy. (Srinivascon, 1990.) Coryza with pain and pressure at the base of the nose and a violent cough, aggravated at night when getting undressed or around 2 or 3 a.m., followed by characteristic thick expectoration. Loss of smell may occur and an inability to breath through the nose. (Jouanny, 1991.)

Cinnabaris corresponds to stringy mucus which is very sticky, from the back of the nostrils. Periorbital pains which are violent, stabbing in nature, moving from the lacrimal orifice to the temporal region. Pain on the dorsal side of the nose as if wearing heavy glasses. The eyes can be scarlet red. Pain is caused by the least contact. (Jouanny, 1991.)

Complications.

These occur when the infection spreads into and beyond the bony boundaries of the sinuses. Cysts can form as well as a brain abscess which severely compromises the patients life. (Loch, 1990.)
Summary.

Sinusitis is being increasingly recognised as a common clinical entity. To protect against infections of the paranasal sinuses, it is essential to keep the ostia patent, the mucus of proper viscosity, and the cilia actively beating.

A number of surgical procedures are available to treat chronic sinusitis that does not respond to appropriate medical therapy.

Homoeopathy has been successfully used to treat the various symptoms connected with sinusitis. However, few controllable studies have been undertaken. This research endeavours to show the effectiveness of two different homoeopathic treatment regimes on chronic sinusitis. Homoeopathy is always non-toxic due to the successive dilutions and therefore has no risk of overdose. (Jouanny, 1991).

The ultimate aim of all treatment is to alleviate the patient's discomfort.
CHAPTER THREE

MATERIALS AND METHODS.

3.1 The data of this research is of two kinds: primary data and secondary data. The nature of each of these two types of data will be given briefly below.

The primary data.

Three types of primary data were needed:

1. Clinical pictures of sinusitis obtained by means of a case-history questionnaire.
2. Patients response to the treatment obtained by means of a case-history questionnaire to determine their perception.
3. The observation of the researcher in terms of the physical changes of the appearance of the nasal mucosa.

The secondary data.

All secondary data was obtained from books, journals articles and any related literature, to ascertain the signs and symptoms needed to diagnose sinusitis.
3.2 **Criteria for Admissibility.**

Only data obtained from the case-history questionnaire and the physical changes recorded were used.

3.3 **Research Methodology.**

The objective of this study was to evaluate the effectiveness of *Luffa Operculata* and a combination of *Kalium Bichromicum* and *Cinnabaris* on treatment of chronic sinusitis.

The research topic was advertised in various newspapers and notices were placed on notice boards in all the local supermarkets. A sample group of 40 patients was obtained through convenience sampling. The criteria for acceptance was having sinusitis for longer than six month and not being immunocompromised. They were randomly divided into two groups. It was a double blind study. One group was treated with *Luffa Operculata* 4XH, three times a day, for a period of four months. The other group was treated with a combination of *Kalium Bichromicum* 5CH and *Cinnabaris* 5CH for a period of four months. The patients received the medication in a pillules form and were instructed to to take five pillules three times a day, sucking them until they dissolved.

The medication was supplied by a recognized manufacturer and dispensed by a qualified pharmacist.

There were a total of 8 dropouts resulting in 15 patients completing the research in the *Kalium Bichromicum* and *Cinnabaris* group and 17 patients in the *Luffa Operculata* group.
Both groups were required to complete a case-history questionnaire before the treatment commenced and every 4 weeks thereafter for a period of four months. At each consultation they were presented with their next months supply of medication.

The data collected was then analyzed in the form of monthly spreadsheets to compare the effectiveness of the two modes of treatment. The information from the spreadsheets was then placed into frequency and correlation tables. The Wilcoxon Signed Rank test was used to test for statistical significance within the group for some of the data as well as the Mann-Whitney U-test for assessing significance between the groups for some of the data. This was all done on the Statgraphics computer package (Statagraphics Plus Package.)

3.4 THE SPECIFIC TREATMENT OF EACH SUBPROBLEM.

3.4.1 Subproblem 1.

The first subproblem was to evaluate the reaction of a combination of homoeopathic Kalium Bichromicum and Cinnabaris on chronic sinusitis patients with reference to the patients response and the physical appearance of the nasal mucosa in order to determine the effectiveness of the treatment.
The Data Needed.

The data needed for testing the hypothesis of subproblem one was obtained from the answers to questions in the case-history questionnaire and the physical findings. This questionnaire was filled in by both patient groups. (Appendix A). The following data from the patients was needed:-

a) Headaches - types, location, frequency.
b) Status of nasal catarrh.
c) Frequency and severity of post-nasal drip.
d) Facial swelling - location, severity.
e) Any concomitant symptoms found.

The nasal mucosa was examined with a nasal speculum and the swelling and colour were graded.

The Location of the Data.

Only the response from patients that were accepted for the research and were treated with Kalium Bichromicum and Cinnabaris were used.

The Means of Obtaining the Data.

All the data needed was collected by means of a questionnaire and from the physical findings. The questionnaire was given to all the patients being treated at their first consultation, and again after a 4 week period. This was repeated until the patient had completed the same questionnaire 5 times.
3.4.2 Subproblem 2.

The second subproblem was to evaluate the reaction of Luffa Operculata on chronic sinusitis patients with reference to the patients response and the physical appearance of the nasal mucosa in order to determine the effectiveness of the treatment.

The Data Needed.

The data needed for testing the hypothesis of subproblem two was obtained from the answers to questions in the case-history questionnaire and from the physical findings. This questionnaire was filled in by both groups of patients. (Appendix A). The following data from the patients was needed:-

a) Headaches- types, location, frequency.
b) Status of nasal catarrh.
c) Frequency and severity of post-nasal drip.
d) Facial swelling - location, severity.
e) Any concomitant symptoms found.

The nasal mucosa was examined with a nasal speculum and the swelling and colour were graded.

The Location of the Data.

Only the response from patients that were accepted for the research and were treated with Luffa Operculata were used.
The Means of Obtaining the Data.

All the data needed was collected by means of a questionnaire and from the physical findings. The questionnaire was given to all patients at their first consultation and again after a 4 week period. This was be repeated until the researcher had completed the rating scale 5 times.

3.4.3 Subproblem 3

The third subproblem was to integrate the results of subproblem one and subproblem two in order to determine which of these two modes of treatment is the most effective in the treatment of chronic sinusitis.

The Data Needed.

The data needed to test the hypothesis was the information gathered from the patients questionnaires and the from physical findings. The information was analyzed in order to evaluate the two modes of treatment.

The Location of the Data.

The data captured from subproblem one and two was used.

The Means to Obtain the Data.

It was extracted from the spreadsheets of the previous subproblems.
CHAPTER FOUR

THE RESULTS.

1. Incidence

Graph 4. The Amount of Years Suffering From Sinusitis.

The sample group was well chosen as 74% had sinusitis for longer than 4 years.

2. HEADACHES.

Graph 4.1. Headache Frequency changes.

The percentage of people who said yes to having headaches that month. The Wilcoxon signed rank test was used between month one and three within each group. This showed a statistically significant difference, the Kalium Bichromicum and Cinnabaris group had a value P=0.031 and the Luffa Operculata group had a value P=0.033. There was no significant difference between the groups when the Mann-Whitney-U-Test was used.
Table 4.1.1. Percentage Headache Types and Location with Kali Bich & Cinn.

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<th>none</th>
<th>frontal</th>
<th>supraorbital</th>
<th>vertex</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dull ache</td>
<td>0</td>
<td>58.3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>throbbing</td>
<td>0</td>
<td>25</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>congested</td>
<td>0</td>
<td>16.7</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

During month one 25% had no headaches and 58.3% of the ones with headaches had frontal dull aches.

Table 4.1.2. Percentage Headache Types and Location with Luffa Operculata.

<table>
<thead>
<tr>
<th>MONTH 1</th>
<th>none</th>
<th>frontal</th>
<th>supraorbital</th>
<th>vertex</th>
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</thead>
<tbody>
<tr>
<td>none</td>
<td>26.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dull ache</td>
<td>0</td>
<td>71.4</td>
<td>10.5</td>
<td>5.3</td>
</tr>
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<td>throbbing</td>
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<td>14.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>congested</td>
<td>0</td>
<td>14.3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

During month one 26.3% had no headaches and 71.4% of the ones with headaches had frontal dull aches.

Both groups are very similar in the first month at which time no treatment had been received yet.
Table 4.2.1. The Type and Location of Headaches with Kali Bich & Cinn.

<table>
<thead>
<tr>
<th>MONTH 3</th>
<th>none</th>
<th>frontal</th>
<th>supraorbital</th>
<th>vertex</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dull ache</td>
<td>0</td>
<td>80</td>
<td>6.7</td>
<td>0</td>
</tr>
<tr>
<td>throbbing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.7</td>
</tr>
<tr>
<td>congested</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

During the third month 53% no longer experienced headaches and of the ones that still did 80% had frontal dull aches.

Table 4.2.2. The Type and Location of Headaches with Luffa Operculata.

<table>
<thead>
<tr>
<th>MONTH 3</th>
<th>none</th>
<th>frontal</th>
<th>supraorbital</th>
<th>vertex</th>
</tr>
</thead>
<tbody>
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<td></td>
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<tr>
<td></td>
<td>58.8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dull ache</td>
<td>0</td>
<td>80</td>
<td>5.9</td>
<td>5.9</td>
</tr>
<tr>
<td>throbbing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>congested</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

During the third month 58% no longer experienced headaches and 80% of those who did had frontal dull aches.

Table 4.3.1. The Type and Location of Headaches with Kali Bich & Cinn.

<table>
<thead>
<tr>
<th>MONTH 5</th>
<th>none</th>
<th>frontal</th>
<th>supraorbital</th>
<th>vertex</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>46.7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dull ache</td>
<td>0</td>
<td>80</td>
<td>13.3</td>
<td>0</td>
</tr>
<tr>
<td>throbbing</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>6.7</td>
</tr>
<tr>
<td>congested</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
During the final month 46.7% no longer had headaches. 80% of those who still had headaches had the frontal dull aches.

**Table 4.3.2. The Type and Location of Headaches with Luffa Operculata.**

<table>
<thead>
<tr>
<th>MONTH 5</th>
<th>none</th>
<th>frontal</th>
<th>supraorbital</th>
<th>vertex</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>52.9</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dull ache</td>
<td>0</td>
<td>80</td>
<td>11.8</td>
<td>5.9</td>
</tr>
<tr>
<td>throbbing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>congested</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

During the final month 52.9% no longer had headaches and 80% of those who still had headaches had the frontal dull aches.

3. POST-NASAL DRIP.

**Graph 4.2. The Frequency of Post-Nasal Drip.**

The percentage people saying yes to the occurrence of post-nasal drip. There was a statistically significant difference between month three and month five of the Kalium Bichromicum and Cinnabariris group. The Wilcoxon Signed Rank Test was used and a value $P=0.046$ was
recorded to show this difference. There was a marked drop in the Luffa Operculata group between month one and three. There was no statistical difference between the groups.

4. FACIAL SWELLING.

![Graph 4.3. The Frequency of Facial Swelling.](image)

The percentage of people saying yes to having facial swelling. There was a 23% drop in the Kalium Bichromicum and Cinnabar group from the first to the third month. There was a 45% drop in the occurrence of facial swelling in the Luffa Operculata group from month one to month three.

5. FATIGUE

![Graph 4.4. Frequency of Fatigue.](image)

There is a steady decline in the Luffa Operculata group from 84% to 70%, to 47.1% in the final month.
6. MUCOSAL SWELLING.

Graph 4.5.1. The Frequency of Mucosal swelling with Kali Bich & Cinn.

The moderate and severe categories decreased slightly from month one to month three, but increased again in month five.

Graph 4.5.2. The Frequency of Mucosal swelling with Luffa Operculata.

The extreme swelling in the Luffa Operculata group dropped from 15.8% in month one to none in month five. The severe cases dropped from 42% to 11%.
7. MUCOSAL COLOUR.

**Graph 4.6.1.** The changes in Nasal Mucosal colour with Kali Bich & Cinn.

![Bar graph showing changes in nasal mucosal colour with Kali Bich & Cinn.](image)

There was a Statistically significant difference between month three and month five of this group. The value was P=0.046 was obtained using the Wilcoxon Signed Rank Test.

**Graph 4.6.2.** The changes in Nasal Mucosal colour with Luffa Operculata.

![Bar graph showing changes in nasal mucosal colour with Luffa Operculata.](image)

The Pink colour increased by 26% from month one to month three. The pinkish colour increased by 30% over the same time frame. The red colour decreased by 25% during those months.
DISCUSSION

The aim of the study was to evaluate the effectiveness of two modes of homoeopathic treatment on chronic sinusitis. This was achieved by analysing the patients perception of the treatment in terms of how they perceived their various symptom changes during the four months of treatment as well as the physical findings during these months.

My sample group consisted of 40 patients of which 89.8% had suffered from sinusitis for more than 3 years (graph 4), thus my sample's accuracy, as chronic sinusitis sufferers, was achieved.

The frequency of headaches within each group reduced significantly between month 1 and month 3 of treatment (graph 4.1). The percentage decrease in headaches in the Luffa Operculata group was 44.1% and in the Kalium Bichromicum and Cinnabar is group was 37.7%. There was no reduction, rather an increases in headaches occurred, between month 3 and month 5 of the treatment. This is probably due to the fact that the treatment was given on an acute basis and no simillimum was prescribed. This means that the patient was improved by the treatment but would need a similimum to complete the cure.

There was no significant difference between the two groups in terms of the frequency of the headaches. Both groups appeared effective in the treatment of headaches, thus supporting the literature (Jouanny, 1991 and Julian, 1979).
The type and location of the headaches appeared to be mainly frontal in both groups at the initial consultation and stayed consistent throughout. The Luffa operculata group showed a greater improvement than the Kali Bich group by the 3rd month (table 4.2.1 and 4.2.2). This would be due to the fact that Luffa is indicated in sinus headaches, especially frontal, dull aching ones (Raeside, 1965).

There was a 28.3% increase in patients without headaches in the Kali Bich group after the first month which then dropped by 6.6% at the fifth month stage. In my opinion this was due to the fact that no simillimum was prescribed. The same can be seen in the Luffa group which increased by 32.5% and then in similar fashion to the Kali Bich group dropped by 6%. There was thus a marginally better response to the Luffa treatment.

The percentage of people suffering from post-nasal drip at the initial consultation was even in both groups. By the final month the Luffa group had proved more effective with a 21.1% drop in post-nasal drip occurrence in the sample group (table 4.2.2).

The Kali Bich group had a marginal drop of 3.7% after its initial increases (table 4.2.1). This substantiates the literature which claims that Luffa is effective in treating post-nasal drip (Wiesenhauer et al., 1989), however it does not substantiate the literature which claims that Kali Bich is indicative in reducing post-nasal drip (Srinivason, 1990).

There was a marked decrease of 89.8% in the amount of people suffering from facial swelling within the first three months of treatment in the Luffa group (graph 4.3). There was a 46.6% decrease in the amount of people suffering from facial swelling within the same months in the Kali Bich group (graph 4.3). This is a marked
improvement but not as impressive as the Luffa group. This would indicate that Luffa is more indicative in the treatment of facial swelling in chronic sinusitis.

Luffa appeared to alleviate the fatigue accompanying the sinusitis to a greater extent than the Kali Bich even though the initial groups were the same. This again supports the literature which states that it alleviates both physical and corporal fatigue (Wiesenauer et al. 1989)

There was a 6% decrease in fatigue over the five months in the Kali Bich group and was therefore not as effective as the Luffa group. In the Luffa group there was a steady decrease to 44% in the final month. (graph 4.4).

The first hypothesis (pg. 5) is substantiated by the fact that there was a marked decrease in headaches as well as post-nasal drip in the Luffa group, more so than in the Kali Bich group. The Luffa group also had a more substantial decrease in the facial swelling and fatigue than the Kali Bich group. All of which points to a more positive perception of the Luffa than the Kali Bich treatment.

The physical findings which are the other variables by which we are assessing this research were broken down into two categories, nasal mucosal colour and swelling.

The mucosal swelling in the Luffa group decreased markedly by the 5th month with no more extreme cases and fewer severe cases than in the Kali Bich group. (graph 4.5.1 and 4.5.2). This shows that not only did the people perceive the treatment to be working in a curative way but the physical findings back them up.
The mucosal colour changes were marked in the Luffa group where the red mucosal colour decreased substantially during the 3rd to 5th month of treatment. (graph 4.6.2). There was no real colour change in the Kali Bich group. (graph 4.6.1)

A healthy nasal mucosa is a pinkish, pink colour. Luffa had the greatest move towards these two colours during the treatment. This was expected when one looks at the literature. (Wiesenauer et al., 1989)

Both the swelling decreases in the Luffa group and the positive colour changes substantiate the second hypothesis (pg. 6), that Luffa would show positive physical changes. The Kali Bich group, however did not show an overall positive change and was not as effective as the Luffa group.
CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS.

The purpose of this study was to evaluate the two modes of treatment for chronic sinusitis. We have shown that both treatments worked on chronic sinusitis to varying degrees. Luffa Operculata however appears to be more effective in all areas studied. We have also noted that the treatment worked during the initial three months and then decreased in efficacy towards the fifth month. This implies that one must give a chronic or simillimum treatment with the acute treatment in order to obtain lasting results.

I recommend that a larger sample group be obtained in order to make the study more statistically valid and reliable. Therefore each sample group should contain 30 or more patients. I would also suggest using a placebo group as a control group, which would enable one to be more statistically accurate. I further recommend that one group receive an acute as well as a chronic remedy, (according to the simillimum principles), to assess whether or not it would have a positive effect on the results. I suspect that this would ensure that the decrease in efficacy towards the fifth month that was noted in this study would not occur.
REFERENCE LIST.


APPENDIX A

DEPARTMENT OF HOMOEOPATHY.

CASE - HISTORY QUESTIONNAIRE.

INSTRUCTIONS.

1. Section one is to be answered by the patients under the supervision of the researcher.

2. Section two is to be answered by the researcher following a physical examination of the patient.
PATIENT-CONSENT FORM.

I, __________________________________________, hereby understand that I am participating in a research project on chronic sinusitis, being conducted by a fifth year student at the Technikon Natal.

The consultations shall consist of clinical observations in the form of questionnaires and physical examinations. A regime of treatment shall be given and the treatment period shall be five months.

Patient Signature.________________________________ Date.

Witness Signature.__________________________ Date.