The Symptomatic Effect of Non-Surgical Epidermal Liposuction on Myofascial Pain Syndromes

INTRODUCTION
Hypothesis:

The breakdown of adhesions between the subdermal fat layers, the fascia and the muscles delivered by manual application of suction to the skin over the painful areas may reduce the level of perceived pain in patients who suffer from myofascial pain syndrome, fibromyalgia and myofibrositis by reducing or eliminating the inflammatory properties of the adhesions.

REVIEW OF THE LITERATURE

This is the first known study of its kind and was coincidentally noticed during routine applications on patients whose chief complaint was treatment resistive areas of body fat storage. There are however, a host of studies relative to myofascial pain that lend credence to the discussion here. One study indicated the dramatic need for interdisciplinary cooperation on identifying and treating this disorder. Another pointed out the importance of the relatively small distance between pain relief and relapse of pain especially with a history of chemical dependency. One study concluded the consistent harm from the use of over the counter and street drugs in the self treatment of this disorder. One study pointed out a distinct correlation between joint hypermobility and fibromyalgia. Several of the studies showed coincidental correlation between chronic fatigue and fibromyalgia. It was difficult to distinguish whether this was a problem of semantics or if there is a true correlation. The terms are often used interchangeably in the medical literature.

One additional correlation in the literature now is that patients with immune disorders such as HIV show a high incidence of reported myofascial pain. It is postulated that this is a direct result of the reduced ability of the immune system. Some thoughts have been proffered, however, that the sedentary life style acquired by these patients is a more likely possible etiology.

CURRENT RESEARCH

After hearing patient reports of relief of certain long standing pains, future body fat patients were screened to meet the diagnostic protocols of this study and the measurement tools were used on intake thereafter. That is part of the reason for the limited number of cases used in this study.

The diagnosis of myofascial pain syndrome for the purpose of this collection, was restricted to female patients who had reported musculoskeletal pain in the cervicodorsal spine and related soft tissue areas of 6 months duration or more. Pain was experienced daily, reported as constant and ranged from a dull ache to a sharp pain. In order to qualify for the study, a patient must have exhibited an increase of 10 beats per minute on resting pulse when a defined trigger
point was subjected to manual palpation. Not less than three points must be found to be positive with at least 2 minutes rest between each point.

Seven female patients were found to be qualified and were subjected to the procedure according to the protocol outlined herein. These pain measurement tools were used to measure the perceived change in symptoms.

**VISUAL ANALOG PAIN SCALE**

**PLEASE rate your current level of pain.**

[----------------------------------------------------------]

0        1        2        3        4        5        6        7        8        9        10

No Pain                                                                         Unbearable

**PAIN TIMING SELF ASSESSMENT**

Circle the timing of your Pain (the % of time during the day, week or month you have pain)

10% = rare, 50% = intermittent 100% = constant
25% = occasional 75% = frequent

**PAIN SEVERITY SELF ASSESSMENT**

Circle your Severity of Pain

1+ = minimal (no handicap; a nuisance only)
2+ = slight (causes slight handicap)
3+ = moderate (causes significant handicap-threshold of labor disabling pain)
4+ = severe (intolerable and precludes activity precipitating it)

**SUBJECTIVE IMPROVEMENT ASSESSMENT**

Since beginning treatment here, my condition has improved:

-10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 (%) Circle

**TREATMENT PROTOCOL**

The treatment Protocol consisted of eight, 20-minute sessions delivered not more than three times per week and never within 36 hours of a previous procedure. Suction applications were delivered uniformly over the entire muscle area through a nylon/dacron garment used to protect the skin.

**THE PROCEDURE**
RESULTS

<table>
<thead>
<tr>
<th>PATIENT</th>
<th>VAPS</th>
<th>TIMING</th>
<th>SEVERITY</th>
<th>IMPROVEMENT</th>
</tr>
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<td>4/3</td>
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<td>7</td>
<td>7/2</td>
<td>100/25</td>
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<td>85</td>
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The average self assessed level of pain of the patients on intake was 8.28 and 4 on release representing a perceived improvement of over 48%. The average timing of pain on intake was 85.71% of the time and 35% of the time on release representing an improvement of 41%. The severity rated on intake averaged 3.9 and was 2.4 on release that equated to 62% perceived improvement. When the patient rated the improvement, it averaged 71.4%.

CONCLUSIONS

The data in this small study indicate an initial phase reduction in the perception of pain. Every patient was able to rate some improvement of the pain. Only one patient had findings that indicated some other issue such as symptom magnification, secondary gain, and condition or doctor dependency.

SUMMARY

It is suspected that a combination of mechanical applications to the soft tissues may have some physiologic affect on the pain generating mechanism found in myofascial pain syndromes. It is concluded that the female patients in this study perceived less pain after the procedure than before and rated it as effective in relieving the pain they felt. Treatment of patients using this procedure has been effective.

SUGGESTIONS

This study may be continued and perhaps repeated using other mechanical applications such as deep tissue massage, weight lifting or taebo.
REFERENCES


