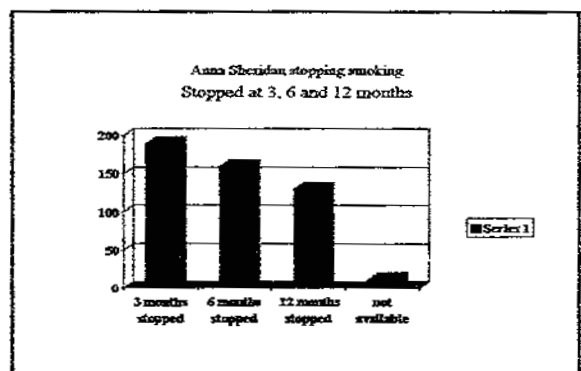
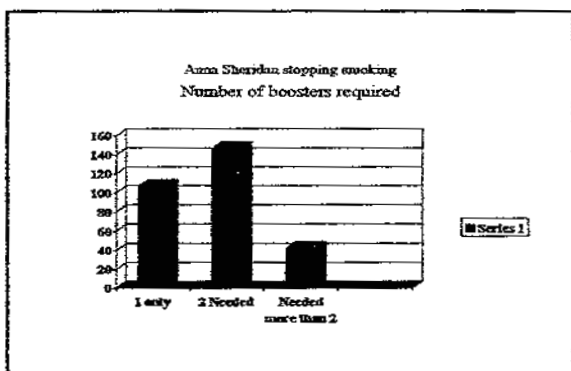
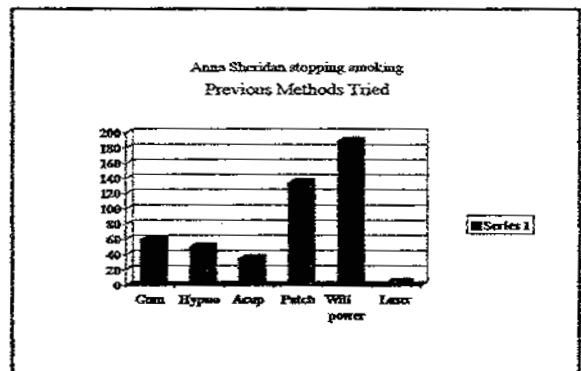
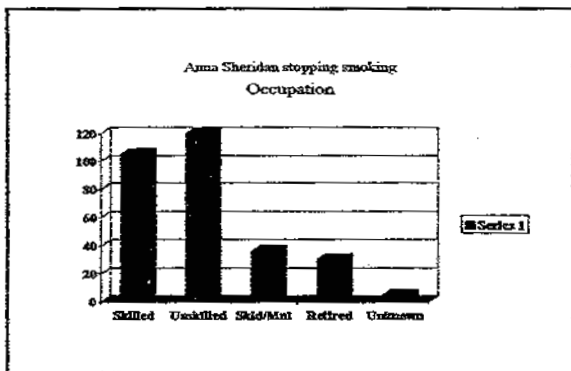
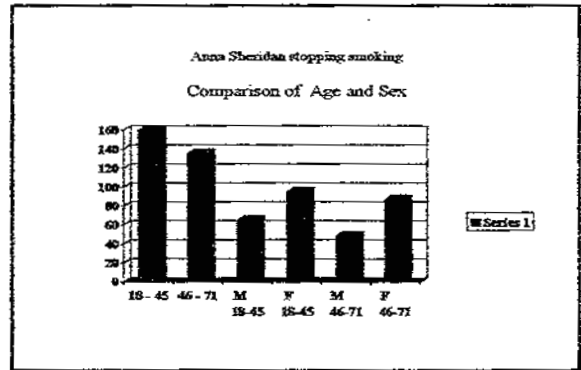
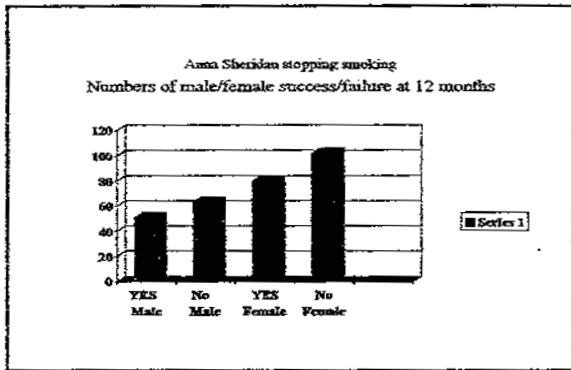


Omega Laser Systems Ltd

## **Anna Sheridan Laser Therapy Centre Project Evaluation 1999-2000**

*Low level laser therapy – Project  
Evaluation to assess the effectiveness as a  
treatment for stopping smoking – The  
Clinical Experience*



# Low Level Laser Therapy

## *Project Evaluation to assess the effectiveness of the therapy as a treatment for stopping smoking*

Anna Sheridan, laser Therapy Centre, Dumfries and Galloway, SW Scotland

### **Brief description of the project evaluation**

Anna Sheridan has been providing the laser therapy stopping smoking service for 5 years and is committed to the excellent results and services she provides. When research and grant monies became available specifically for stopping smoking, Anna complied this project evaluation in order to be able to apply. The advantages are enormous - LLLT is non invasive, has no side effects, is relatively quick with treatments of around 30 minutes per session over 3 - 5 treatments and laser therapy does not require nicotine or drug replacement. The main reason for laser therapy not being suggested routinely by doctors and the health service in general as an alternative aid for stopping smoking has been the lack of evidence supporting the therapy. This is now being addressed with controlled double blind evidence from Middlesex University (2001). This project evaluation, while not a double blind controlled study, provides valuable information from the experience of the clinic. These are real results and provide an analysis and break down of the various elements relating to a successful outcome. With data recording from all the smoking cessation clinics now being standardised according to these outcomes the growing body of evidence for the success of the therapy for smoking cessation can be better collated and recorded.

The aims of Anna Sheridan's Project Evaluation were several:

- to determine the effectiveness of the clinic's results as an aid to successfully stop smoking
- assess whether successful results were age or sex dependent
- assess whether the results were occupation sensitive
- assess how they compared with other forms of smoking cessation previously used by the clients included in this project evaluation
- assess whether booster treatments were necessary for a successful outcome.
- assess the effectiveness of continuing not to smoke over 3, 6 and 12 months

This report outlines some of the key findings which it is hoped will improve treatment protocols for already established clinics offering the treatment.



**Results – clinical data**

	<b>Stopped smoking at 12 months</b>
Male	45% (51 men)
Female	43.7% (80 women)
18 – 45 years	43%
46 – 71	44.4%
Previously failed with alternative methods	81.7%
Required 3 <sup>rd</sup> treatment	11%
Required only 1 <sup>st</sup> or 2 <sup>nd</sup> treatment	M 87.9%    F 82.5%
Used 24 hour help line	0.04% (12 people)

*Table. Results of Anna Sheridan stopping smoking evaluation.*

<b>Laser Group</b>	<b>cessation 3 months</b>	<b>cessation 6 months</b>	<b>cessation 12 months</b>
Successfully stopped smoking during the study	190 64%	160 54%	130 44%

## Discussion

The main findings of the results suggest that Laser Therapy is effective in providing 64% of patients with an aid to stop smoking, 54% still not smoking at 6 months and 44% still not smoking at 12 months.

The study did not indicate a significant difference in gender for successful cessation, nor between age groups, nor between skilled and unskilled work groups. It works equally well and appeals to a wide range of participants across a wide range of social classes, young and retired people and both skilled and unskilled population.

Of the 100% successful participants who stopped smoking using Laser Therapy, 81.7% had tried alternative methods of stopping and failed.

Only 11% of those participants who had successfully stopped required a third treatment and 82.5% of females and 87.9% of males only needed 1 or 2 treatments. This is very different to the findings of the Middlesex study which suggested a 4<sup>th</sup> treatment showed better results. However the 24 hour helpline available in Anna Sheridan's study was only used by 12 out of 296 participants does not mean that the very fact this was available acted in the same way as the 4<sup>th</sup> available treatment in the Middlesex study.

- Did having the 24 helpline in place make success in quitting more likely?
- Was the 4<sup>th</sup> treatment booster in the Middlesex University having the same or a different effect?

**Alternative therapies:** According to information provided by a National Government funded smoking cessation help line, using Nicotine Replacement Therapy only has a success rate of 20% and there is no data at 12 month follow up.

DOH quotes 55% success through smoking cessation clinics (supplying NRT, Zyban or counselling) but this for only 5 days!!!

The Cochrane report, requiring abstinence for 6 months follow up, conclude some studies have shown antidepressants (bupropion and nortriptyline) can aid smoking cessation but that it is not clear if this is drug specific. Nor do they quote the actual percentage of successful cessation for comparison with laser therapy efficacy.

The Cochrane report concludes that NRT increases quit rates by approximately 1.5 to 2 fold regardless of setting and not requiring additional support. Imperial Cancer Research carried out a study that concluded NRT aided 15% of smokers who seek help to give up the habit. The laser studies are more efficacious.

In addition both NRT and antidepressants have side effects. One of the most important differences with Laser Therapy is that it does not introduce any chemicals into the system and is completely non invasive. The participant is drug and nicotine free almost from the outset.

NRT is readily available but costly to NHS and/or to the participant - £64 for a months supply. As the numbers of laser clinics increase and the therapy becomes more widely available, participants are no longer restricted by location and perhaps people should be made aware of the option.