



**PRELIMINARY RESEARCH
RESULTS
USING MSTR®
ON CAESAREAN SECTION
SCARS**

Conducted on June 15th - 2019

at

The Newcastle Clinic
4 Towers Avenue, Jesmond,
Newcastle upon Tyne,
NE2 3QE

PRESS RELEASE

I am delighted to announce the results on the preliminary study into the effects of McLoughlin Scar Tissue Release® (MSTR®) on Caesarean Section scars.

The research project was conducted at The Newcastle Clinic, Newcastle, UK on June 15th, 2019 with Consultant Radiologist Dr Peddada Raju.

A General Electric (GE) Soniq S8 ultrasound scanner was used to conduct the test on three test subjects with C-section scars.

Each subjects was pre-scanned and images recorded including:

- Size and depth of scar tissue was also recorded
- and the amount of vascularity both surrounding and within the scar was also imaged.

MSTR® work was then applied for a total of 15 minutes per subject, as a single treatment.

Immediately after MSTR® treatment each subject underwent a post-treatment ultrasound scan conducted by Dr Raju.

All three subjects were shown to have decreased scar tissue in the post treatment scan. One example of improvement was of a scar that was initially measured at 31.5mm pre treatment. The scar was re-measured at just 18.1mm post treatment.

Another example was that of a longitudinal scar reducing in size from 22.7mm pre-treatment to just 10.4mm post-treatment.

In two of the three cases an increase in vascularity was noted, not only in the surrounding tissue but also actually *through* the scar. Interestingly it should be noted that NO vascularity was present in the pre-scan of the same area.

This confirms what has always been stated:

MSTR® helps open the densely bound collagen fibres that make up scar tissue to allow increased blood flow into the area once again.

This preliminary success has now kick-started a larger study that will be undertaken at 'The Newcastle' later in 2019.

You can read more about the MSTR® Research Project here:

<https://www.mcloughlin-scar-release.com/research/>

This initial research project, demonstrating evidence-based outcomes of the MSTR® method of scar tissue treatment, means you can have even more confidence in MSTR® work.

RESEARCH RESULTS

Overview

The scars we researched were transverse C-sections.

Funding

This preliminary pilot study was funded entirely by the author.

Research participants

Research participants were found via social media requests.

The specific objectives for ultrasound imaging using MSTR® technique are:

- Changes in scar tissue size and depth
- Changes in blood flow (vascularity) in adjacent tissues surrounding the scar tissue
- Changes in blood flow (vascularity) within the scar tissue itself

The research team:

Dr. Peddada Raju - Consultant Radiologist

Suzanne Price - Dr Raju's assistant radiographer

Paula Esson - Research liaison

Silke Lauth - Research assistant, MSTR® practitioner

Alastair McLoughlin - creator of MSTR®, lead practitioner

Venue:

The Newcastle Clinic

4 Towers Avenue, Jesmond,

Newcastle upon Tyne,

NE2 3QE

United Kingdom

Hypothesis

Due to the increasing evidence from hundreds of recorded case studies from a large variety of post-surgical and trauma wound scars that display extremely good and consistent changes in scar tissue, we hypothesise that these changes are due to the separation of the tightly bound collagen matrix and substrate found at scar tissue sites.

We hypothesise that blood and lymph flow increases through and around the scar tissue site.

The already observed surface changes in scar tissue density and fibrosis suggests the possibility that collagen fibres within scar tissue are re-aligned forming a more natural alignment - as found in healthy unaffected tissues.

We also hypothesise that adhered structures surrounding a scar are also released.

Frequently sensory changes and improvement in nerve transmission are also noted by case study feedback.

We also have case study evidence that Range-of-Motion tests indicate improved functionality of the spine and limbs. Changes and reduction in lower back pain for example may be another benefit of C-section treatment.

Method

- We conducted the preliminary pilot study on three subjects.
- A patient questionnaire was used to collect general information about the patient. We also included questions concerning the C-section itself: when the surgery/surgeries took place, any physical effects the scar produces and any emotional or psychological effects that might be experienced.
- A pre scan photograph of the C-section scar was taken.
- An ultrasound scan was conducted by Dr Peddada Raju. Images were captured on the equipment. (GE Soniq S8 Ultrasound scanner)
- MSTR® treatment was performed on the C-section scar for 15 minutes precisely.
- A post treatment ultrasound scan was conducted by Dr Raju.
- A post treatment photograph of the C-section was taken.






Results

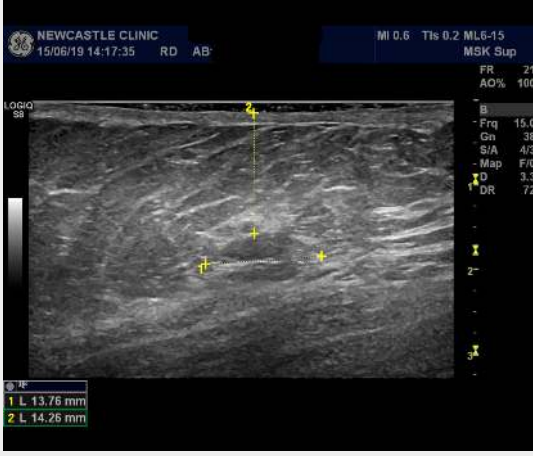
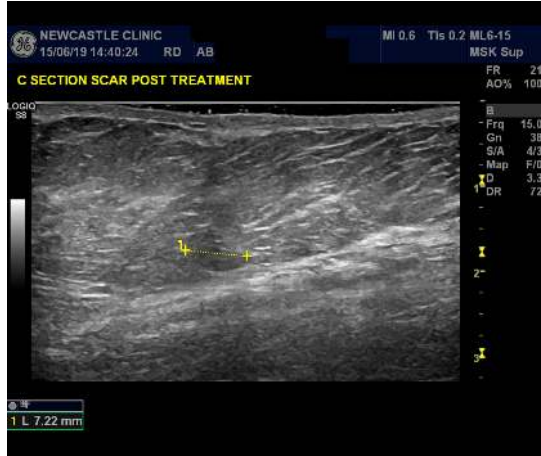
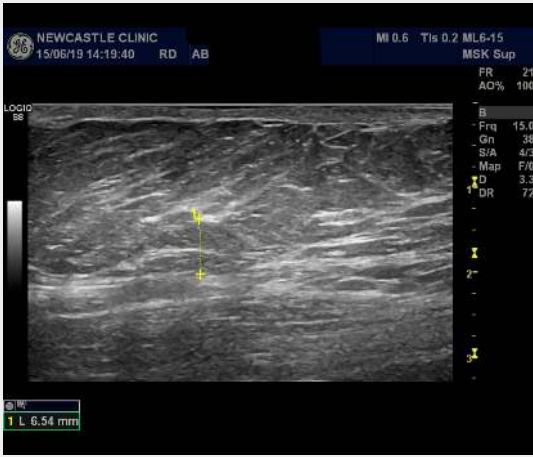

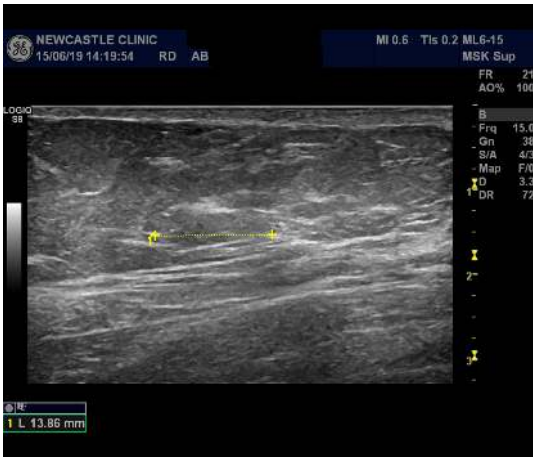

	SUBJECT 1	SUBJECT 2	SUBJECT 3
Age	47 years	53 years	47 years
Number of C - sections	1	3	1
Age of C-sections	13 years	22 years, 18 years, 17 years	20 years
Type	Planned	Emergency, planned, planned	Emergency


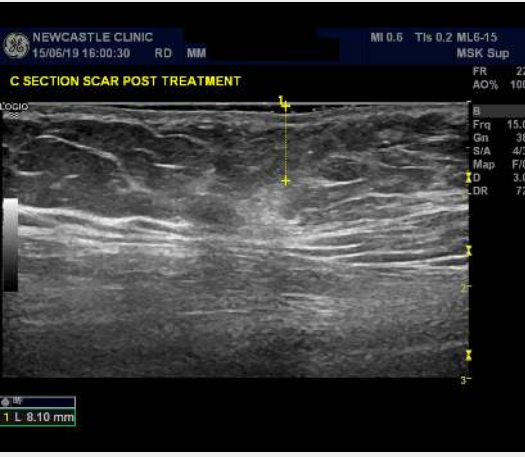

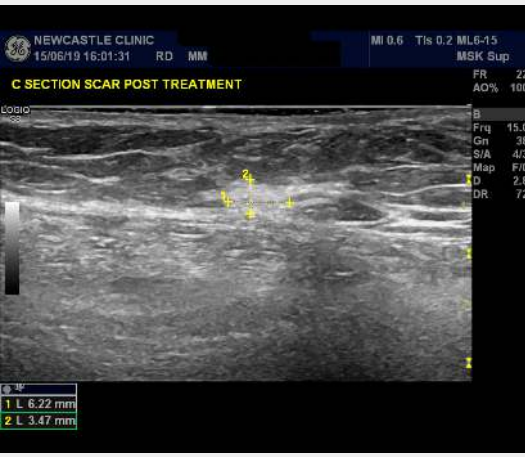


Subject 1	Pre treatment	Post treatment
deepest	31.5mm	18.1mm
longitudinal	22.7mm	10.41mm
deep	9.0mm	5.9mm
transverse	19.5mm	15.0mm
vascularity	none	increased both around and into the scar

Subject 2	Pre treatment	Post treatment
deepest	14.26mm	14.2mm
longitudinal	13.76mm	7.22mm
deep	6.54mm	4.03mm
transverse	13.86mm	7.79mm
vascularity	none	some vascularity around scar

Subject3	Pre treatment	Post treatment
deepest	8.48mm	8.1mm
longitudinal	4.8mm	4.6mm
deep	4.76mm	3.47mm
transverse	8.73mm	6.22mm
vascularity	around scar - none within scar	increased both around and into the scar

Subject 1	Pre treatment	Post treatment
deepest	 <p>NEWCASTLE CLINIC 15/06/19 13:27:45 RD SW MI 1.1 TIs 0.4 ML6-15 Carotid FR 28 AO% 100 CHI - Frq 12.0 - Gn 35 - S/A 2/7 - Map D18 - D 7.0 - DR 68 II - 4- - 6- LOGID 88 1 L 3.15 cm</p>	 <p>NEWCASTLE CLINIC 15/06/19 13:53:51 RD SW MI 0.7 TIs 0.2 ML6-15 MSK Sup FR 20 AO% 100 B - Frq 15.0 - Gn 38 - S/A 4/5 - Map F16 - D 4.0 - DR 72 LOGID 88 1 L 18.10 mm</p>
longitudinal (1) deep (2)	 <p>NEWCASTLE CLINIC 15/06/19 13:29:34 RD SW MI 1.1 TIs 0.4 ML6-15 Carotid FR 28 AO% 100 CHI - Frq 12.0 - Gn 35 - S/A 2/7 - Map D18 - D 7.0 - DR 68 II - 4- - 6- LOGID 88 1 L 2.27 cm 2 L 0.90 cm</p>	 <p>NEWCASTLE CLINIC 15/06/19 13:59:17 RD SW MI 0.7 TIs 0.3 ML6-15 MSK Sup FR 18 AO% 100 B - Frq 15.0 - Gn 38 - S/A 4/5 - Map F16 - D 5.0 - DR 72 LOGID 88 1 L 10.41 mm 2 L 5.90 mm</p>
transverse	 <p>NEWCASTLE CLINIC 15/06/19 13:30:17 RD SW MI 1.1 TIs 0.4 ML6-15 Carotid FR 28 AO% 100 CHI - Frq 12.0 - Gn 35 - S/A 2/7 - Map D18 - D 7.0 - DR 68 II - 4- - 6- LOGID 88 1 L 1.95 cm</p>	<p>image not available</p>

Subject 2	Pre treatment	Post treatment
deepest (2)		image not available
longitudinal (1)	image not available	
deep		
transverse		

Subject 3	Pre treatment	Post treatment
deepest		
deep		<p data-bbox="1082 853 1318 887">image not available</p>
transverse (1) deep (2)	<p data-bbox="531 1301 767 1335">image not available</p>	
transverse		

Total length of all scars measured pre-treatment = 157.89

Total length of all scars measured post-treatment = 104.92mm

This represents a total reduction in all scar tissue measured of 33.55%

Conclusion

After a single 15 minute MSTR® treatment per subject and an immediate rescan of the area there was an observable reduction in the amount of scar tissue measured on the three C-section scars.

A reduction of scar tissue measured at 33.55% is a significant improvement worthy of further research.

Subject to funding we plan to conduct a further study using thirty C-section subjects later in 2019.

At this time we are still awaiting the official report on this preliminary study from Dr Peddada Raju.

Alastair McLoughlin
www.McLoughlin-Scar-Release.com

© Alastair McLoughlin

Below are the reports from The Newcastle Clinic, prepared by Dr Peddada Raju of The Newcastle Clinic - UK, dated June 15th, 2019.

Subject 1:

Ref: PPJR/LE

Scan Date: 15.06.19

18th June 2019

Re: S W D.O.B. 30.10.71

Ultrasound - Caesarean Section Scar

Findings:

The caesarean section scar was examined before and after treatment.

Before treatment, caesarean section scar especially in the central portion of the scar showed evidence of linear area of diminished reflectivity leading up to scar tissue which measures approximately 3.15 cm deep to the skin surface. The approximate dimensions of the scar tissue was 23 mm x 9 mm x 19.5 mm in maximum longitudinal, anteroposterior and transverse dimensions respectively.

There was no evidence of any vascularity noted in or around the scar before treatment.

After treatment, the approximate depth of the scar tissue is 1.8 cm in relation to the skin surface.

Approximate dimensions of the scar have decreased following treatment and now measure approximately 10.4 mm x 5.9 mm x 15 mm in maximum longitudinal, anteroposterior and transverse dimensions respectively.

Interestingly, there is evidence of increased vascularity noted both around and within the scar following treatment.

Yours sincerely

Dr. P P J Raju
Consultant Radiologist

Subject 2:

Ref: PPJR/LE

Scan Date: 15.06.19

18th June 2019

Re: A B D.O.B. 12.05.66

Ultrasound - Caesarean Section Scar

Findings:

On examination of the lower abdomen, there was evidence of vertical and horizontal scar in the lower abdomen. Focal area of the scar at the junction of the vertical and horizontal scars has been interrogated on this ultrasound examination.

Caesarean section scar has been examined by ultrasound examination before and after treatment.

Before treatment, scar tissue in the subcutaneous fat was approximately 14.2 mm deep to the skin surface. The scar tissue measures approximately 13.7 mm x 6.5 mm x 13.8 mm in maximum longitudinal, anteroposterior and transverse dimensions respectively. There was no evidence of any vascularity noted in the scar tissue which had mixed reflectivity and mixed echogenicity.

Following the treatment of the scar, the depth of the scar is unchanged in relation to skin surface. The approximate dimensions of the scar tissue are 7.2 mm x 4 mm x 7.8 mm in maximum longitudinal, anteroposterior thickness and transverse dimensions respectively.

There was no evidence of any vascularity in the scar tissue but there is evidence of mild vascularity noted around the scar tissue following treatment of the scar especially on the power doppler interrogation.

Yours sincerely

Dr. P P J Raju
Consultant Radiologist

Subject 3:

Ref: PPJR/LE

Scan Date: 15.06.19

Re: M M DOB 23.07.71

Ultrasound - Caesarean Section Scar

Findings:

Ultrasound examination has been performed before and after treatment of the caesarean section scar.

Before treatment of this is a section scar, there is evidence of echogenic and hyper-reflective mass of scar tissue noted in the subcutaneous fat, approximately 8.5 mm deep to the skin surface. This scar tissue measures approximately 4.8 mm x 8.8 mm and maximum longitudinal and transverse dimension. Approximate anteroposterior thickness of the scar tissue is 4.8 mm. There was evidence of vascularity noted around this scar tissue but no evidence of any vascularity within the scar tissue before treatment.

After the treatment of the scar, the depth of the scar tissue in the subcutaneous fat in relation to the skin surface is unchanged. The approximate dimensions of the scar tissue following treatment is 4.6 mm x 3.5 mm x 6.2 mm in maximum longitudinal and transverse dimensions respectively. Approximate anteroposterior thickness of the scar is 3.5 mm.

There is evidence of increased vascularity noted around the scar tissue but more importantly, vascularity has extended into the scar tissue which was not noted before the treatment of the scar.

Yours sincerely

Dr. P P J Raju
Consultant Radiologist