

GANGRENE - HOW MASSAGE CAN HELP

by May Brander RMT DIR SMTD

GANGRENE – What is it? – From the Latin word ‘Gangraena’ an eating sore, is the medical term for Death or Rotting of a mass of tissue caused by the lack of blood supply to that area.

There are 3 types of gangrene: gas, damp and dry – the latter being the more common.

- **DRY:** The initial stages of dry gangrene causes dull aching pain, then become extremely painful when palpated. It becomes cold, wrinkled and dry. The colour of tissue will go to brown, dark purple/blue then black. This process can go unnoticed for some weeks or months especially in the elderly and can spread; therefore the earlier it is diagnosed the better. People that are most at risk of dry gangrene are those with atherosclerosis and diabetes.
- **DAMP:** Or Moist gangrene occurs in the feet, toes or legs due to a Crushing Injury or some other factor in which the blood flow stops suddenly. It is a very serious condition, as the blood flow diminishes, dying cells will leak fluid into surrounding tissue becoming moist. Bacteria thrive in moist environments thus multiplying. The skin becomes swollen and blisterous then becomes foul smelling by giving off gasses.
- **GAS:** Also called myonecrosis (destruction or death of muscle tissue) is a type of moist gangrene, which is mostly caused by bacterial infections. These bacteria can survive under conditions, which have little oxygen, and they produce many gasses and poisonous toxins. They inhibit the gastrointestinal, respiratory and female genital tracts, and attack a recent surgical wound, e.g. amputation. It can also be caused by frostbite, diabetes mellitus and cancer. The onset of Gas gangrene is sudden. As with moist gangrene there will be a heavy sensation followed by severe pain and swelling in the tissues caused by fluid or gas. The skin will be red and hot to palpate then turn brown and black. Unlike dry gangrene, this is a rapid progression.



Gangrene is treated by either a vessel bypass to unblock the arterial obstruction, in some cases hyperbaric chambers are used to increase levels of oxygen in the blood, but they are very costly and have severe side effects. Other more common treatments used are “debridement” which is the removal of the dead tissue, or amputation of the limb. Unfortunately, in most cases, amputation is still considered the most “appropriate” treatment of gangrene.

After the removal of a limb, the patient will receive high doses of antibiotics to reduce the spread of gangrene. As the antibiotics are carried through the blood stream, unfortunately diabetics who have poor circulation will not respond well to the antibiotics, the healing will be slow or not at all and often require a second amputation.

I received a call from a distressed husband, asking if I could see his wife as she had had bypass surgery on her left leg to unblock an arterial obstruction and there was little or no blood flow getting into the foot, and she had Dry Gangrene in her first two toes.

I had two options. Do I turn her away as gangrene is a contra-indication to massage, or do I help her as she has no self esteem, no trust in anyone, and had received a very negative attitude as she had an “open invitation” to go back and get an amputation done from her left knee. She had also been told she could try massage as a last resort as she had “nothing else to lose”.

After doing an in-depth consultation I couldn’t just turn her away. By just listening to her lifted her morale.

I discovered she had diabetes for ten years in which she was taking oral medication. Injections were then administered from spring 2004. She was also taking medication for High blood pressure, Beta-blockers and pain relief. The onset of her Dry gangrene was 4 years ago when she went outside in the garden with bare feet and cut her first toe. It didn’t heal so she went to her GP who admitted her to her diabetic clinic every 2 weeks to get the wound dressed. Then she received pain control and further investigations in July 2004 – 3 years after the onset of her condition. She received an arterial by-pass in her left leg in which she had an arterial blockage; there was no posterior tibial pulse or dorsalis pedis pulse in her left foot. Unfortunately the by-pass failed. They tried both medial and lateral sides of the lower limb, but I noticed the scars were healing giving some hope that there was still a small amount of circulation getting through. There were still dressings on the inferior ends of the scars and there was padding on both first two toes. I had to be very careful not to open up the wounds.

Continued on page 18.

I started my treatments by doing a lot of gentle effleurage above the scars and on the medial portion of the gastrocnemius and soleus. Then after assessing her range of movement, I did passive plantar and dorsiflexion. I also did a lot of muscle pump techniques to encourage venous return.

I encouraged her also to do a lot of gentle walking, active ankle exercise, drink plenty of water and do deep breathing exercises to all encourage oxygen intake in the blood supply. I also got her caring husband who came to every treatment, and who wanted to do more for his wife, to do some simple massage above the scars and to make sure she did her exercises.

After the first treatment her ankle was more defined, it wasn't so hot or red and not quite as painful all the time. She was also receiving regular treatments from her chiropodist who was very cooperative to give me advice and understands the importance of combined treatments for my patient's well-being. The nurses were also changing her dressings every few days. After two months, her wounds on her leg healed and she was down to half dosage of her painkillers, and at the beginning of January 2005 the nurses discovered very slight pulses on her left foot - a real breakthrough and confidence builder!

I am still giving her regular treatments and there have been a few complications such as her elderly mother took ill and my patient is anaemic and is awaiting tests, but I saw her toes for the first time this week and where the gangrene started has now healed completely but the second toe is not reversible.

We are now working on maintenance treatments now and more on nutritional advice i.e. adequate hydration and to eat more iron and oxygen rich foods. Also take a lot of gentle exercises and aerobic type workouts.

On the conclusion, if she received massage therapy at the onset of her condition 4 years ago rather than "when nothing else can be done", I am confident she wouldn't have had to go through the ordeal she's had. But it can still help and give hope to others who have circulatory problems.

When doing research into the affects of gangrene using massage, I kept on getting nowhere as it is a contra-indication. One night I was surfing the Internet and came across an interesting article about a Physiotherapist who developed gangrene herself and found massage was her lifeline.

"In the late 1920's a Physiotherapist in Germany, called Elizabeth Dicke, suffered from a widespread infection of the blood vessels which affected the circulation to her right leg. She developed gangrene and her doctors wanted to amputate. As she had also developed angina, gastric, kidney and liver problems she was too ill for surgery and was effectively left in a side ward to die. She had agonising backache and being a Physiotherapist started to massage her back. She noticed an unusual, sharp sensation with the massage and an occasional warm sensation down her leg when there was a sharp feeling.

She was so weak that she asked a colleague to continue to produce these strange sensations. Within four months her colleague had Elizabeth out of Hospital and started back at work within a year. She had normal circulation in her leg and her back pain, angina, kidney and liver problems had all resolved. Elizabeth and her colleagues then spent the next 10 years doing research into the new technique that she had discovered, finding out how it worked and what it was effective in treating. They set up a teaching protocol for all physiotherapy students in Germany. The English name for the technique is Connective Tissue Manipulation In the mid 1980's Jacqueline Flexney-Briscoe studied with a German Physiotherapist who was teaching Connective Tissue Manipulation in England. Jacqueline has since been developing the clinical use of the technique and combining it with Manual Lymph Drainage so that it can be used to treat any condition where the circulation is below par. Connective Tissue Manipulation is a post-graduate Physiotherapy technique in the UK and is not as widely used here as on the continent where it is part of the undergraduate study course. Because of its effect on the circulation and the reduction of tension within the tissues it is effective in treating not only muscle or joint problems area of swelling, pain or stiffness but also in the treatment of organ related problems like indigestion and constipation."

May Brander RMT DIR SMTO practises Remedial & Sports Massage and Reflexology, and is a qualified Baby and Infant Massage Instructor in Alford, Aberdeenshire. Tel. 019755 81489 or email jpburnleochel@tiscali.co.uk

REFRESHER WORKSHOPS

These workshops have started and the feedback has been great as the tutor-therapist ratio is brilliant! These are organised as CPD opportunities and are for you if:

- you would like to review techniques taught on a course be it Swedish Massage, On-Site, Remedial and Sports, Reflexology, Advanced Remedial Massage or Clinical Aromatherapy
- it is a long time since you did your training and you now want to go into practice
- if you just want to refresh and add to techniques

TELL YOUR FRIENDS AND COLLEAGUES

Edinburgh: 28th August 2005, 23rd April 2006
Fife: 9th April 2006

Aberdeen: 2nd April 2006
Inverness: 27th November 2005