MEDICAL BREAKTHROUGHS
RESEARCH SUMMARY

TOPIC: NEW THERAPY FOR SCLERODERMA
REPORT: **MB #4698**

BACKGROUND: Scleroderma is an autoimmune rheumatic disease where an overproduction of collagen produced in the body tissues causes the skin and internal organs to harden. The symptoms and effects range by person, but some common symptoms include hardened patches of skin (locations on the body vary,) painful and numb-feeling fingers and toes, and sharp internal pain in the esophagus, intestines, heart, lungs, or kidneys. Women are four times as likely to have scleroderma and the onset is between 30 and 50 years of age. However, anyone from infants to the elderly can have scleroderma. Possible risk factors include having certain gene variations as other family members, ethnic groups, exposure to certain medications or drugs, and already having another autoimmune disease, like rheumatoid arthritis, lupus or Sjogren's syndrome.
(Source: https://www.scleroderma.org/site/SPageNavigator/patients_whatis.html;jsessionid=00000000.app30132b?NONCE_TOKEN=9B76519DF6B5819859319F0B63B805C9#.XheCGVVKhaQ , https://www.mayoclinic.org/diseases-conditions/scleroderma/symptoms-causes/syc-20351952)

DIAGNOSING: A physical exam will be conducted as well as a blood test to check for elevated levels of antibodies the immune system produced. The doctor will also take a sample of skin to be tested in the lab. If there are complaints about internal pain, the doctor may run other tests, including imaging, organ function, and other blood tests.
(Source: https://www.mayoclinic.org/diseases-conditions/scleroderma/diagnosis-treatment/drc-20351957)

NEW TECHNOLOGY: A new stem cell transplant that's commonly known to treat cancer is improving the quality and quantity of life for those with scleroderma. Rheumatologists at University of Wisconsin Health tested the treatment since they have already been conducting bone marrow transplants for decades. Surgeons take out a sample of the patient's bone marrow, isolate the stem cells, and use radiation and chemotherapy to clean out their immune system. The same stem cells are later injected back into the patient's immune system with the hope that new cells will grow and the system is rid of the bad ones. The process is dangerous when the cells are taken out because the patient's immune system is more vulnerable, making infections more likely to occur. However, after four and a half years, 79% of patients that underwent the treatment were alive without serious complications compared to 50% that were treated with the original drugs.
(Source: https://madison.com/wsj/news/local/health-med-fit/man-with-severe-autoimmune-disease-gets-stem-cell-transplant-at/article_7e8e17a5-21da-52f8-b728-fe584dab2b77.html)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com