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	Ottawa 7/16/2010
Ms. Inez P. Petersen Note: Pay particular attention to Page	Our File No: 103961
3 of this letter.	

I refer to your letter of June 26, 2010.

What you describe is similar to problems encountered by mastectomy patients who undergo removal of lymph nodes. Similar symptoms would arise in individuals with dysfunctional lymphatic systems due to fibrosis, ischemia, occlusion, necrosis and/or calcification of lymph nodes.

Mammography can often allow visualization of dysfunctional calcified lymph nodes. The mammography machine can be set to include tissue within the upper lateral quadrant of the breast and the axillae. Dysfunctional lymph nodes appear as well-demarcated spheroidal radiodense zones in the 1-3 cm diameter range.

The most knowledgeable individuals about immunologic effects of silica, antibody testing in prosthetic and silica-affected patients include Dr. D. Smalley and Dr. D.R. Shanklin. Background and contact information is provided for Dr. Smalley. With reference to radiology and MRI, the best option is Dr. M.S. Middleton (see info attached). These three specialists may be able to provide a contact for someone in your area.

A publication relevant to your situation is included for your information.

Yours P. Brais, Ph.D., F.C.I.C. Attachments

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NOTES

Dr. David L. Smalley (MS, PhD '81) was appointed director of the Tennessee Department of Health Laboratory Services in Nashville. He had been director of laboratories for the American Esoteric Laboratory of Memphis (formerly Memphis Pathology Laboratory) for the past five years and has been a faculty member at the University of Tennessee Health Science Center for almost 26 years. Smalley maintains an appointment at the university as clinical professor of pathology and laboratory medicine and clinical professor of clinical laboratory sciences. He also was promoted to the rank of brigadier general in the U.S. Army Reserve and assigned as assistant surgeon general, Mobilization, Readiness and Reserve Affairs, and deputy commanding general, Army Reserve Medical Command. Smalley also received the 2006 Alumnus Award from the Arkansas State University College of Nursing and Health Professions.

	Shanklin, M.D., F.R.S.M. Douglas R.
ADDRESS City Province/state	CONTACT DR. D. SHALLEY (ABOVE) FOR DR. SHANKLIN'S CONTACT INFORMATION
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Abstract Recent evidence confirms the fundamental involvement of the human immune system in the reaction to implantation of siliconebased medical devices. An as yet-to-be particularized epitope of many complex substances sharing siloxane structures is presented through the MHC-II apparatus with development and retention of T cell memory. This memory can be tested for in practical terms using one or more forms of silica, which links the immunohistopathology and autoimmune attributes of "silicosis" with those of "siliconosis." The lesions of siliconosis are typical of those for persistent antigens and delayed, cell mediated hypersensitivity. The basic descriptive pathology of the reaction to silicone has been known since soon after introduction of silicones in medical procedures, with the exception of some details related to the more recent discoveries on the role of cytokines in the immunopathic process. The clinical consequences of siliconosis are common and can be severe in some individuals implanted with silicone devices.

Key Words Siliconosis - Silicosis - Silicone - Silica - Immune - Granulomas -Persistent antigen - Medical device failure - T cell-mediated process -Autoimmune - Conversion - Chemical toxicity