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TITLE: Probiotic (VSL#3) for Gulf War Illness

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14. ABSTRACT The overall objective of the study is to determine whether probiotic Visbiome™ will improve 1) Intestinal symptoms of Irritable Bowel Syndrome and 2) Non-intestinal symptoms (fatigue, joint pain, insomnia, general stiffness and headache) associated with IBS. All these symptoms are part of the Gulf War illness. We screened our first participant in September 2013. Overall, we have screened 101 and enrolled 62 Gulf War Veterans. We have stopped enrolling patients in this study. The stool samples analysis ongoing as well the statistical data analysis.					
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Introduction:

Gastroenteritis plays a major role in changing intestinal microflora. More than one third of Gulf War (GW) veterans report gastroenteritis during deployment and it is a risk factor for development of irritable bowel syndrome (IBS) after deployment. We also demonstrated that there is a strong association between IBS and extra-intestinal disorders (e.g. fatigue, joint pains, insomnia, generalized stiffness, and headache). This would suggest that IBS as well as extra-intestinal disorders in GW veterans have a unifying etiology. There is scientific evidence that probiotics by restoring normal gut flora improve symptoms of IBS. Probiotics have also been shown to improve arthritis and fatigue by changing fecal flora. This is the basis for our present protocol to study the effect of probiotics on GW illness.

Body:

During this year the following goals were accomplished:

The abstract: Double-Blind Placebo controlled study of Probiotics for GW illness and IBS was presented at the V.A. State of Science meeting.

The manuscript for this study has been submitted for publication and is under review.

The stool samples have been transported to V.A. Medical Center in Charleston, SC for microbiota analysis. The previous collaborator at Laurence Berkeley Laboratory, CA retired last year and is no longer available to complete the stool microbiota analysis. We have found another collaborator IN South Carolina who has kindly agreed to complete the analysis.

The methods used by the previous collaborator in Laurence Berkeley Laboratory to do partial work were different; now newer methods are available; all the samples will be re-analyzed.

Key Research Accomplishments.....

- The final abstract paper was presented at the V.A. State of Science meeting in August 2020.
- The manuscript for this project has been submitted for review/publication.
- Stool microbiota analysis has been re-started.

Reportable Outcomes.....

Nil.

Conclusion:

Study has stopped enrolling; abstract was published and the manuscript is under review for publication.

Stool samples microbiota data are being analyzed.

References.....

Nil.

Appendices.....

Nil.