QIBA Ultrasound Shear Wave Speed (SWS)
Clinical Applications and Biological Targets Subcommittee Call
Monday, 24 February 2014; 1 PM CT
Call Summary
Additional notes provided by Dr. Dhyani

In attendance

Anthony Samir, MD, MPH (Co-Chair)
David Cosgrove, MD (Co-Chair)
Michael Andre, PhD
Paul Carson, PhD
Jun Chen, PhD
Manish Dhyani, MD
Timothy J. Hall, PhD
Mark Palmeri, MD, PhD
Ioan Sporea, PhD
Daniel Sullivan, MD

RSNA

Joe Koudelik
Julie Lisiecki

Moderator: *Anthony Samir, MD, MPH*

Agenda:

1. Progress on QIBA clinical project and literature review
2. QIDW data: technical issues
3. Clinical forms

Discussion points:

- Regarding QIDW, Dr. Andriole requested some sample images demonstrating PHI masking, etc., indicating that uploading may commence soon; Dr. Dhyani plans to upload only jpeg files for the near future
- Awaiting IRB approval based on review and masking of 19 specific PHI criteria
- Dr. Dhyani is conducting a literature review on confounders of clinical relevance for liver inflammation / steatosis:
    - To date, 1,548 papers have been indexed for shear wave elastography
    - Approximately 106 clinical studies with ARFI and SWE.
    - Approximately 450 clinical studies with TE.

	PubMed Search	Results	Combining
a.	"Transient elastography AND liver"	659	**1548**
b.	"ARFI and liver"	143	
c.	"Acoustic Radiation Force Impulse Imaging AND Liver"	932	
d.	"Shear Wave elastography AND liver"	122	
e.	"Real time elastography AND liver"	105	

    - These papers have been compiled in an Excel spreadsheet, with key findings summarized
        - This spreadsheet will be circulated for review; Documents will be made available via *DropBox*
        - Input is welcome: mdhyani@partners.org
        - Hepatologist assistance welcome in ranking priorities for future investigation based on clinical significance and overall effects of confounders
        - Dr. Samir would like to compile a summary of studies that found steatosis had an effect vs. studies that showed no effect, with a similar summary for inflammation
            - A checklist of screening considerations for confounders was suggested, particularly any that may influence variance and classification at various stages of fibrosis
- Dr. Samir hopes to circulate a standardized case report form soon to get feedback for guidelines on using pooled data

- Dr. Samir is currently in the process of applying for a grant to study the quantifying effects of transducer pressure on shear wave velocity; additional phantom work might be needed
- Dr. Carson plans to do a needs assessment of fellow AIUM members at the upcoming conference regarding medical problems that could benefit from a QIBA effort; an interest in "volume flow" will be discussed on an upcoming technical committee call.

Action items:

- Dr. Dhyani to create a DropBox folder for document review; (to invite via RSNA staff)
- Dr. Cosgrove to send information to RSNA staff for QIBA-wide distribution regarding call for papers: Special Issue on Quantitative Imaging for *Investigative Radiology*
- Dr. Samir to circulate a standard case report form for feedback

Schedule for March:

Date	*Time (CT)*	*Day*	*Committee/ Subcommittee*	*Moderator*
03/07/2014	11:00 am CT	Friday	COMBINED: System Dependencies / Phantom Subcommittees Call	Dr. Wear
03/14/2014	11:00 am CT	Friday	US SWS Technical Committee	Mr. Milkowski
03/21/2014	11:00 am CT	Friday	COMBINED: System Dependencies / Phantom Subcommittees Call	Dr. Palmeri
03/28/2014	11:00 am CT	Friday	US SWS Clinical Applications Subcommittee	Dr. Samir

Conferences for Ultrasound on QIBA Wiki

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