Discussion to: New approach to the mitral valve through the left anterior minithoracotomy for combined valve and coronary surgical procedures

Presenter: Oleksandr Babliak, MD, PhD
Invited Discussant: Tom Nguyen, MD
Corresponding Author: Dmytro Babliak, MD

From the Division of Cardiac Surgery, Diagnostic and Treatment Center for Children and Adults of the Dobrobut Medical Network, Kyiv, Ukraine; and Division of Cardiothoracic Surgery, University of California, San Francisco, Calif.

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Address for reprints: Dmytro Babliak, MD, Diagnostic and Treatment Center for Children and Adults of the Dobrobut Medical Network, 3, S.Idzikowskyh st, 03151, Kyiv, Ukraine (E-mail: Babliakd@gmail.com).
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Dr Tom Nguyen (San Francisco, Calif). Thank you. I want to thank the Association for the opportunity to discuss this video, and I want to thank the American Association for Thoracic Surgery (AATS) for the privilege of the microphone. I want to echo what you start off with—as a Ukrainian surgeon, we are happy that you’re here at the AATS, so thanks for coming. I also want to applaud and congratulate you for pushing the envelope in trying to brave a novel approach to address mitral coronary disease. I believe this is how we make progress, by not being complacent but by pushing for change and being creative. Admittedly, doing a coronary artery bypass graft (CABG) and a mitral through a left thoracotomy seems pretty wild, and admittedly, I probably wouldn’t do it myself, but I do think we need to remind ourselves that a lot of advances in cardiac surgery were wild at the time, and now they’re mainstream. For example, putting a patient on the heart and lung machine, stopping the heart, taking stuff out, putting things back together again, and now it’s mainstream. And perhaps one day, this will be mainstream for us to do, but time will tell. For the time being, I have three questions for you. Can you elaborate on the learning curve? Your program has done a total of 24 cases. How many cases did it take for you to be comfortable with coronary revascularization and mitral surgery via the left chest? I assume one needs to be relatively facile with the left thoracotomy CABG first, and I would also add that taking a mammary down through a small left thoracotomy is not an easy feat before embarking on a left thoracotomy and a CABG and a mitral at the same time.

Dr Oleksandr Babliak (Kyiv, Ukraine). So, thank you very much for your questions. So, we have a total experience of around 600 cases for the coronary multivessel CABG through the left anterior thoracotomy with cardioplegia. Out of these 600 cases, only for the last 2 years we have started to do as a first choice the mitral valve combined cases through the left anterior thoracotomy with this kind of approach. Before that, we also had the experience like we were able to do mitral valve through the left ventricle and through the left anterior thoracotomy. Regarding the learning curve, it is mostly about how to expose the mitral valve. I forgot to mention that the left atrial size is also very important criteria, which we include. So, if the left atrium is more than 5 to 6 centimeters, it will be easier. So, when we look at the numbers, we did not find the learning curve for the combined procedures, but eventually, we progressed from the launch of the new instruments. We started to get better exposure and to understand how to expose mitral valves better. This is the learning curve.

Dr Nguyen. Thank you. Two more quick questions. For a good mitral repair, exposure is important. Do you feel that you have adequate exposure to the mitral valve to consistently do a good repair? What percent of the patients with primary degenerative mitral regurgitation did you repair? Intuitively, and most of the panel could probably agree, it makes sense to approach the mitral valve to the right chest because you see the valve, but through the left chest, there’s a lot of manipulation and twisting the valve to be able to get it to be able to view the mitral valve to repair.

Dr Babliak. I will say if a surgeon has very good experience with a degenerated mitral valve through the right chest, minimal invasive approach, he will perform with the same quality with left approach too. That is my feeling.

Dr Nguyen. Thank you. My last question. Have you considered comparing your studies of left anterior CABG mitral with perhaps your CABG mitral just so there is a...
benefit? Thank you again. And I appreciate the privilege of
discussing this video.

**Dr Babliak.** Thank you very much. So, the problem is that I
am not sure we will be ever able to perform randomized trials
with the patients because once they know that the procedure
can be done without cutting the sternum, they do not agree to
participate in the studies. That’s the main limitation.

**Unidentified Speaker 1.** So, I just echo everyone’s feel-
ings. Thank you for being here from Ukraine. We have pub-
lished our data on left thoracotomies mostly for readers. We
almost have 20 reported at the present date. Yes, the expo-
sure’s fantastic. We have done bypass of one of the cases,
and that went well, too. The only learning curve I had at sur-
gery is the mitral valve is upside down. You just have to
remember—especially if you think about repairing it, the
valve is upside down. Thank you.

**Dr Babliak.** Thank you very much.

**Dr Y. Joseph Woo.** So, I noticed it was a right-handed
surgeon cutting from the left side. Then it looked like the
same glove was then tying from the right side of the patient
when you were tying the sutures. What side of the patient
does the operating surgeon stand on?

**Dr Babliak.** Thank you. Thank you very much. Yes, I
forgot to mention this. So, the best position for the surgeon
to do coronary surgery is to be on the left side. When it’s
mitral, the surgeon has to go into the right side and then
again left. The surgeon is going back to finish the case
from the left side.

**Dr Babliak.** Thank you everyone.

[applause]

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