Intrapartum ultrasound – an integrated approach for best prognosis

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To the Editor,

In the last decade, several ultrasound (US) parameters were reported with high predictions regarding successful vaginal birth [1-3]. The case presented here reflects a situation, quite frequent in general practice, where the improper use of US measurements may diminish the confidence of labor care providers in the US data.

A low-risk laboring primipara was evaluated clinically and US, as part of an observational study aimed to determine the potential benefit of routinely intrapartum US monitoring (ClinicalTrials.gov Registry: NCT02326077). A favorable prognosis for vaginal birth was evident at the beginning of the second stage of labor based on the evolution of head progression parameters (fig 1 A,B). However,
A rare mechanical prosthetic valve dysfunction

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To the Editor,

We describe the case of a 37-year-old woman with a long history of rheumatic multivalvular disease and an operation for two mechanical valve prostheses in aortic and mitral positions 8 years prior presentation. Due to acoustic shadowing and artifacts, complete prosthetic valve evaluation by transthoracic echocardiography (TTE) was difficult and transesophageal echocardiography (TEE) was performed. The TEE showed that the mitral position was a single-disc valve with dysfunction. M-color Doppler showed the opening of the valve every two cardiac cycles. We also found the opening time of the mechanical valve in aortic positions was alternately long and short (fig 1).
Mechanical prosthetic valve dysfunction caused by pannus or thrombosis is an unusual but serious complication of heart valve replacement [1]. The most common symptom of prosthetic valve dysfunction is dyspnea, which may occur as a manifestation of obstruction in valves implanted both in aortic and in mitral valve position. TTE Doppler echocardiography is the method of choice for the evaluation of prosthetic valve function. In these cases that prosthetic valve dysfunction is suspected and TEE may be used. It is an accurate noninvasive method for assessing prosthetic valve function. Real time tridimensional TEE provides unique visualization and better understanding of the relationship between cardiac structures than two-dimensional imaging as well as accurate measurements valvular and ventricular functions [2].

Reference