

Eliminating Extra-Cardiac Activity

The Corridor4DM Setup Screen is used to verify the center position of the LV and apical and basal limits of the heart on mid-ventricular vertical long-axis (VLA), horizontal long-axis (HLA) and short-axis (SA) images. These locations represent initial positioning seeds for the program to find the surfaces of the heart. Processing is initiated from this screen.

Sometimes the image may contain extra-cardiac activity that may cause the surface estimator to misplace the LV surface in this activity. If this is the case, the following procedure should be followed.

STEP 1: Access the Setup Screen

Select the Setup button as highlighted and circled in red in Figure 1. This will present the mid-ventricular vertical long-axis (VLA), horizontal long-axis (HLA) and short-axis (SA) images for step 2. Step 6 Step 3

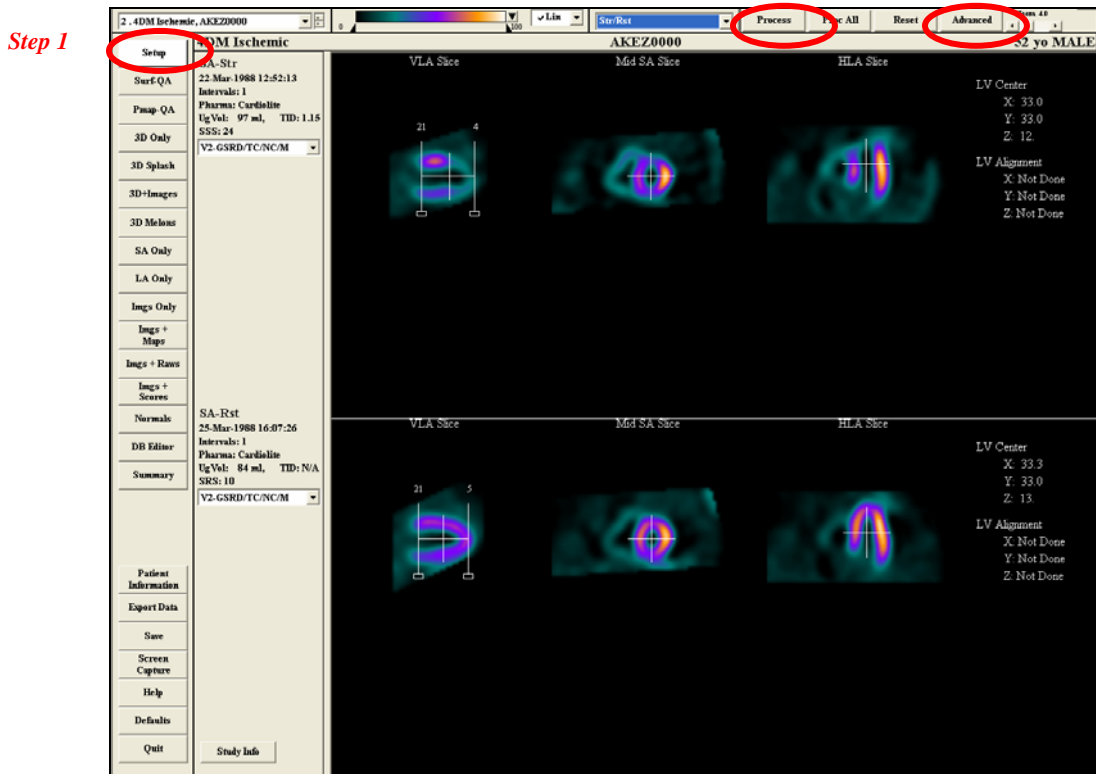


Figure 1. Setup screen in Corridor4DM application.

STEP 2: Reposition the LV Center and Limits

If necessary, re-position the LV center and axial limits on the displayed images as instructed in the [Setting the Processing Limits on the Setup Screen](#) help sheet.

STEP 3: Open the Advanced Algorithm Dialog

Select the Advanced button as shown in Figure 1. This button will present the dialog for the **Advanced Algorithms Options**. The options selected will apply only to the current session of 4D-MSPECT; they are not saved for future sessions. To save the options as defaults, use the Algorithms page in the Preferences Dialog (See the [Modifying the Default Settings for Specific Review Screen](#) help sheet.

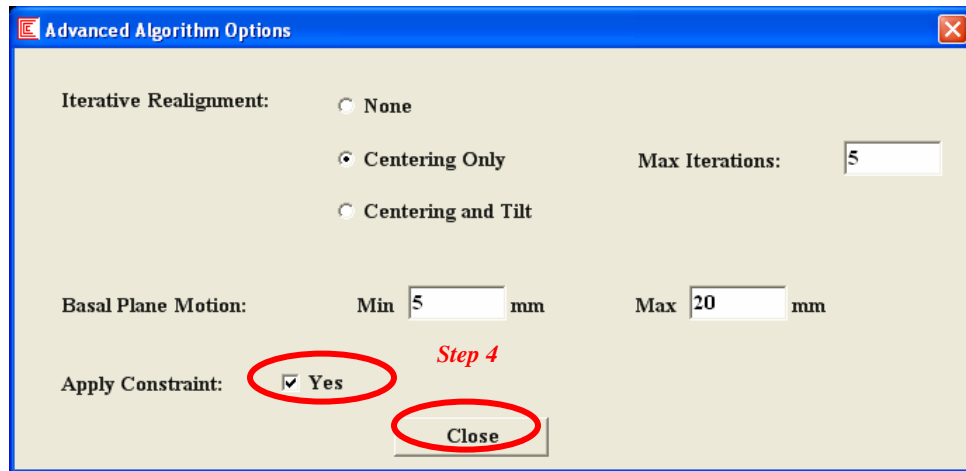


Figure 2. Advanced Algorithm Options Dialog

STEP 4: Choose the “Constraint” Option

Check the “Apply Constraint” checkbox. Click left on “Close” to close the dialog and return to the Setup Screen as shown in Figure 1.

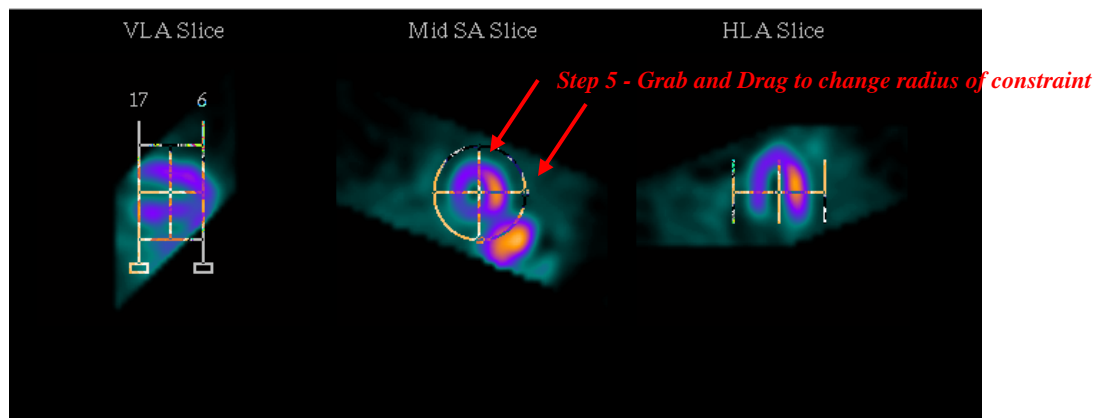


Figure 3 Improper positioning of LV constraint to minimize the effect of extra-cardiac activity on Setup screen.

STEP 5: Adjust the Constraint

To adjust the radius of the constraint on the SA images:

- Place the mouse pointer over one of the SA image constraint drag handles at either 12:00 or 3:00.
- Hold down the left mouse button and drag the constraint drag handle so that the extra-cardiac activity is excluded.
- Release the left mouse button.

Note: The constraint may need to be adjusted using one or both of the handles.

- Using the HLA and VLA images, confirm that the extra-cardiac activity is excluded on all orthogonal views.

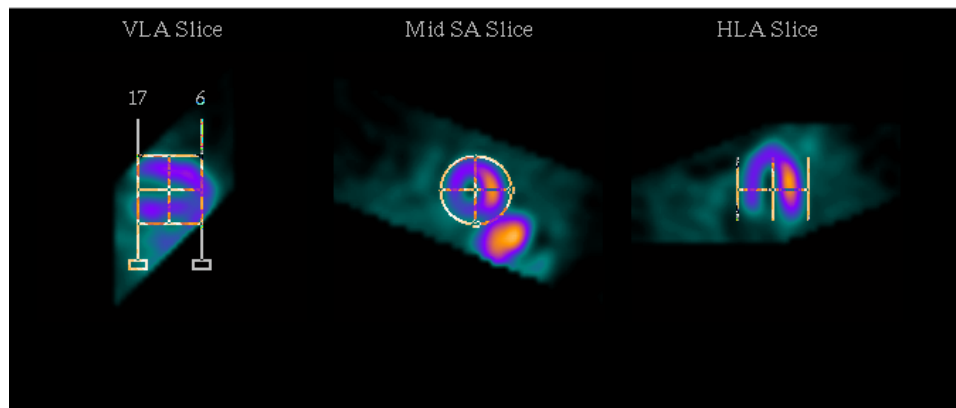


Figure 4. Proper positioning of LV constraint minimize the effect of extra-cardiac activity on the surface estimation algorithm.

STEP 6: Process the Study

Click left on the **Process** button, as shown in Figure 1, to process the study. When processing is complete, the Surf-QA screen is displayed.

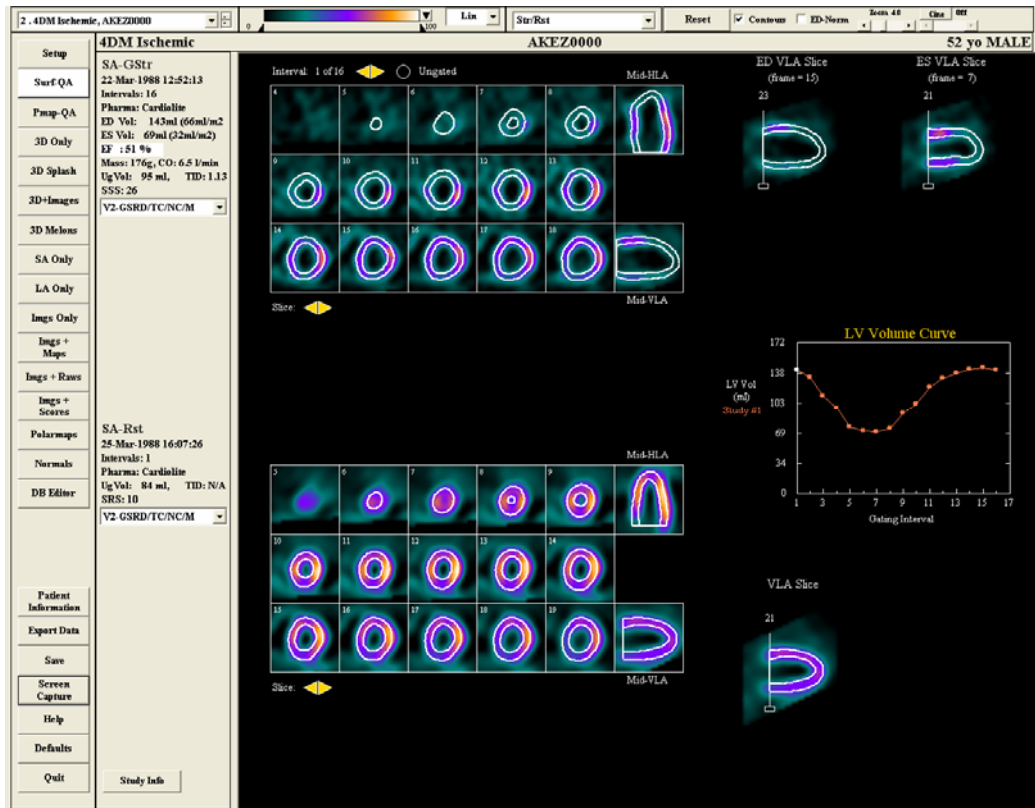


Figure 5 Surface QA (Surf-QA) screen displayed when processing is complete (Splash layout with Diastolic Function option turned off).