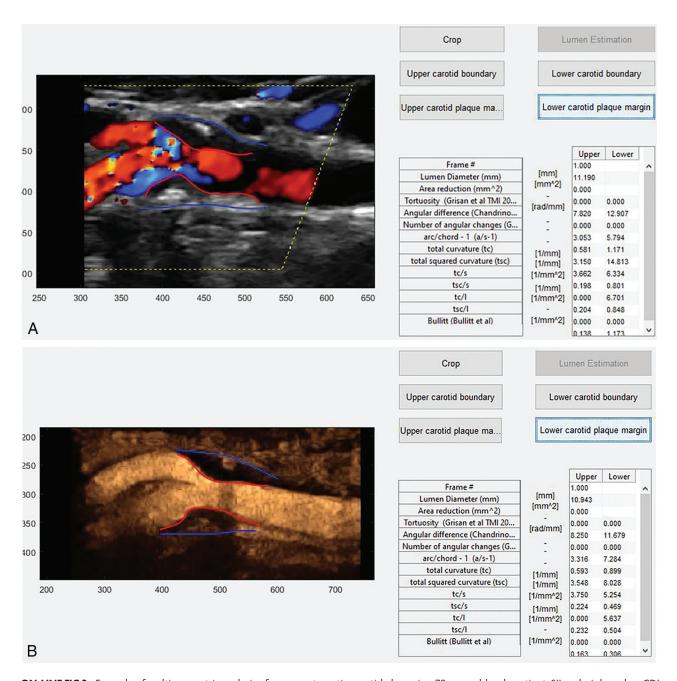


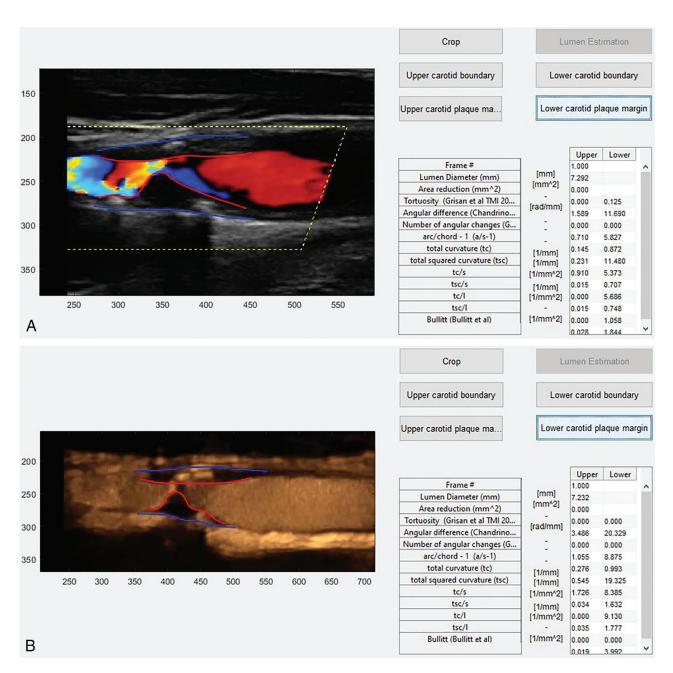
**ON-LINE FIG 1.** Schematic representation of the cosine rule used for measurement of surface angles and calculation of the surface irregularity index.



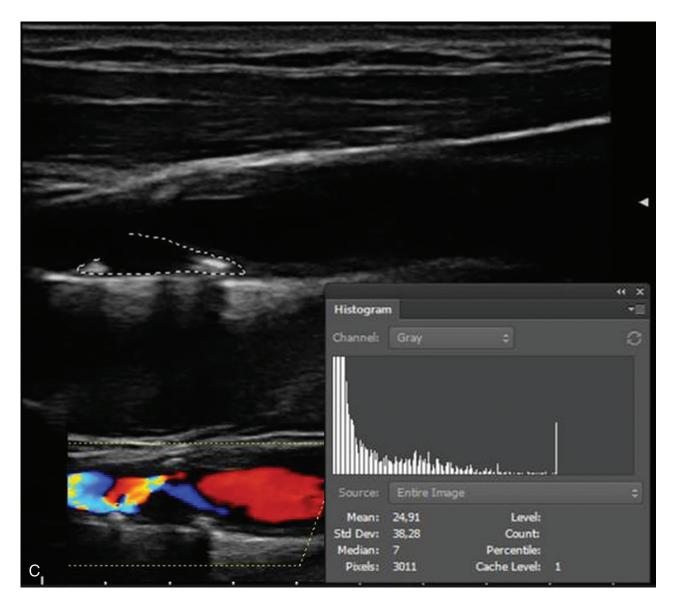
**ON-LINE FIG 2.** Example of multiparametric analysis of an asymptomatic carotid plaque in a 78-year-old male patient. SII analysis based on CDI (A) and CEUS (B) with the *red lines* outlining the plaque surface and the *blue lines* outlining the carotid outer wall. Note the more accurate delineation of the plaque using CEUS. The SII corresponded to the variable termed "angular difference." Echogenicity histogram analysis (C) shows the GSM value calculation on a plaque outlined by an ROI.



**ON-LINE FIG 2—Continued** 



**ON-LINE FIG 3.** Example of multiparametric analysis of a symptomatic carotid plaque in a 51-year-old female patient. SII analysis based on CDI (A) and CEUS (B) with the *red lines* outlining the plaque surface and the *blue line* outlining the carotid outer wall. The plaque borders are more clearly and readily delineated using CEUS. The SII corresponded to the variable termed "angular difference." Echogenicity histogram analysis (C) shows the GSM value calculation on a plaque outlined by an ROI. The CDI is included on the left lower part of the image for assisting plaque borders delineation.



**ON-LINE FIG 3—Continued**