

12. Ultrasonic devices—Use vibrational energy at frequencies below human hearing

- Ultrasonic surgical aspirator—Uses ultrasonic frequency to break up tumor tissue without harming vital structures, i.e. blood vessels and nerves

Figure 32—CUSA EXcel™ Ultrasonic Surgical Aspirator



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- Ultrasonic blade—Vibrations denature tissue proteins and coagulate blood vessels

Figure 33—Laparoscopic Coagulating Shears (LCS®)



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