

### *Fitting the Singularity Spectra and Calculating the Fractal Parameters*

A sixth-order polynomial was fitted to points defining the singularity spectra; this provided the best fit over a wide range of resulting spectra. On the rare occasion that an incorrect fit was

produced by the regression algorithm, this was identified by eye and corrected before calculation of the spectral parameters. The spectral parameters ( $h_m$  and width-at-half-height) were calculated directly from the polynomial regression equation using analytical techniques.

## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

### Not a 7% Solution: A “20% Cocain” Syringe



Although “a seven-per-cent solution” of cocaine may have sufficed for the fictional character Sherlock Holmes, this unusual syringe in the Wood Library-Museum’s collection is clearly marked by the manufacturer as “20% Cocain.” As toxic a concentration of local anesthetic as that may seem today, remember that cocaine’s powerful side effects were not widely understood during its first decade or so of clinical use, so 20% solutions were painted topically on patient’s gums and smaller volumes of such high-concentration cocaine were injected. Bear in mind that many American dentists during the late 1880s and 1890s were used to seeing jactitations and even frank seizures during hypoxic nitrous oxide anesthetics, so a cocaine-induced *grand mal* seizure was not that novel a clinical experience. (Copyright © the American Society of Anesthesiologists, Inc.)

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