Conformational Changes of Bovine Serum Albumin in 4M Urea and Ultra High Dilutions of Different Drugs

ABSTRACT : Conformational changes of bovine serum albumin (BSA) due to homeopathic potencies like Chelidonium 30, Sulphur 30, Nux vomica 30, Santonin 30, Ethanol 30, 90% ethanol (control) and 4M urea (control) were observed by fluorescence emission and electronic circular dichroism (CD) spectra. Fluorescence intensities in urea and homeopathic potencies differed markedly from the control (90% ethanol) by 11.4-29.5. The control showed the highest intensity and 4M urea solution the lowest. The CD maxima and minima varied in different potencies and the control with respect to the wavelength and intensities. The results indicate that different potentized drugs produced conformations of BSA.

Key words: Bovine serum albumin; conformation; homeopathic drugs; urea; fluorescence; circular dichroism.