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We study the dynamics of optical bisolitons in optical fibers with dispersion management. Slow dynamics of the spectrum of such solitons is described by an integro-differential equation containing a parameter. This parameter captures the properties of the fiber, the optical pulses, and the dispersion map. We found bisoliton solutions and investigated their properties as dependent on the value of this parameter. We discovered the bistable character of this dependence. In particular, for each value of this parameter there are two bisolitons with different energies. To solve this equation we used the method of polynomial deformations of the iteration operator spectrum. (Received February 27, 2007)