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We investigate the boundedness character, the oscillation, the periodic nature, and the global stability character of the nonnegative solutions of the difference equation x(n+1) = (a + bx(n) + cx(n-1))/(A + x(n)), n=0,1,... where the parameters a, b, c, and A are nonnegative real numbers such that a+b+c>0, and where the initial conditions x(-1) and x(0) are nonnegative real numbers. (Received July 23, 2000)