On two-point boundary value problem for third-order functional differential equations

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Efficient conditions sufficient for the solvability of the problem

$$u'''(t) = \ell(u)(t) + q(t),$$
$$u(a) = c_1, \quad u'(a) = c_2, \quad u(b) = c_3$$

are established. Here $\ell : C([a,b];\mathbb{R}) \to L([a,b];\mathbb{R})$ is a linear bounded operator, $q \in L([a,b];\mathbb{R})$, and $c_i \in \mathbb{R}$ $(i = 1,2,3)$. Sign-constant solutions are discussed, as well.