

## AN INTEGRAL EQUATION VIA WEAKLY PICARD OPERATORS

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**Abstract.** In this paper we shall study the existence and uniqueness and data dependence: continuity, monotony, differentiability with respect to parameter for the solutions of the following integral equation

$$x(t) = [g_1(t) + \int_a^t K_1(t, s, x(s))ds] \cdot [g_2(t) + \int_a^t K_2(t, s, x(s))ds], \quad t \in [a, b].$$

Our results are in connection with some results by E. Brestovanska (Qualitative behaviour of an integral equation related to some epidemic model, *Demonstratio Mathematica*, **26**(2003), no. 3, 603-609.)

**Key Words and Phrases:** Integral equations, Picard operators, fixed points, data dependence.

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