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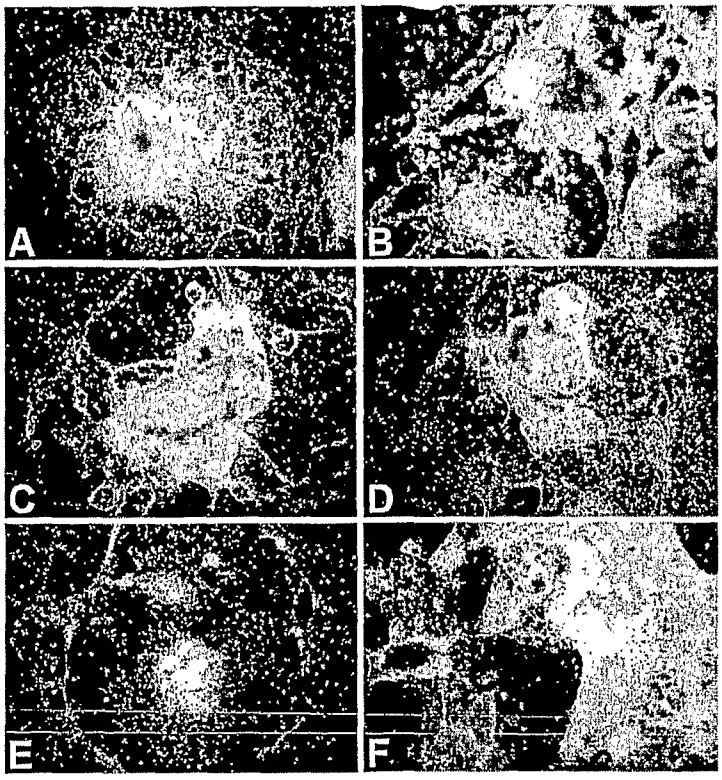
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(54) Title: DIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS AND CARDIOMYOCYTES AND CARDIOMYOCYTE PROGENITORS DERIVED THEREFROM



(57) Abstract: The present invention provides a method to improve current culturing methods for the differentiation of cardiomyocytes from hES cells. The method includes culturing the hES cells in the presence of ascorbic acid or a derivative thereof. Preferably the culturing is conducted in serum free conditions. The invention also includes isolated cardiomyocytes and cardiac progenitors differentiated by the methods as well as the use of these cells in methods of treating and preventing cardiac diseases and conditions. Culture media and extracellular media are also provided which include ascorbic acid for the differentiation of hES cells to cardiomyocytes.

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