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The Development of Lymph Channels in Turtles by the Fusion of Mesenchymal Spaces

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THE DEVELOPMENT OF LYMPH CHANNELS IN TURTLES BY THE FUSION OF MESENCHYMAL SPACES.

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1. The theory that the lymphatic system is budded off from the venous system is a direct product of a special method of investigation, i. e., the injection method.

2. The injection method alone is entirely unreliable, because: (a) Only that portion of the lymphatic system which is in direct connection with the point of injection (lymph sacs) is shown, the unconnected spaces are not indicated. (b) Extravasations and venous injections vitiate the results.

3. Serial sections, both injected and uninjected, of turtle embryos of different ages show the successive stages of the development of lymphatics from the spongy mesenchyme surrounding the aorta and larger arteries, through the formation of independent spaces which constantly enlarge and finally fuse to form continuous channels.

4. The endothelium of the lymphatics arises entirely independent of the venous endothelium from the original mesenchymal cells.