

## AFFINITIES OF ECHINODERM LARVA WITH CHORDATES

The most convincing affinities are noted between the echinoderms and the chordates. Hence many workers regarded the echinoderms to be the nearest group to the chordates. However, modern workers do not support the contention and they hold that the echinoderms and the chordates diverged separately from a common basic ancestor. The affinities are discussed below:

1. **Mesodermal skeletal substance** is present in both.

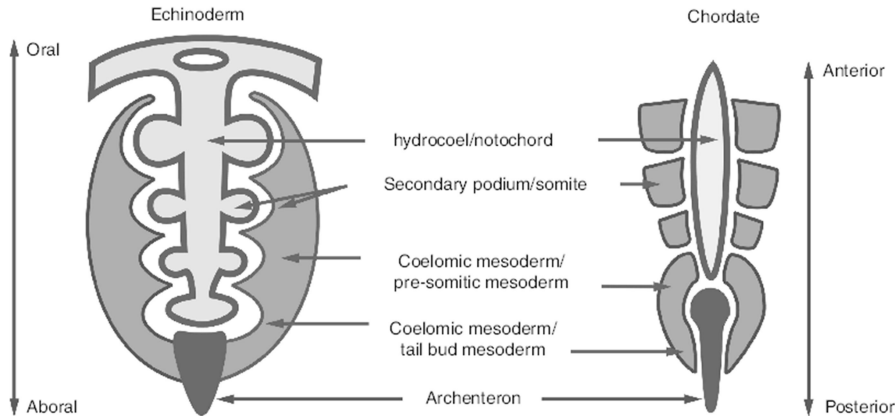
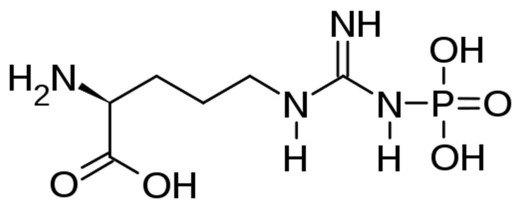


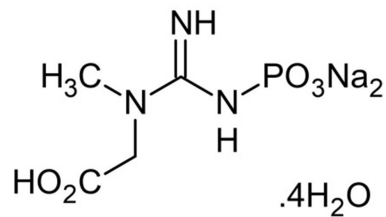
Figure: Comparison of coelomic compartments of an echinoderm arm and the metameric anterior-posterior axis of a chordate (Courtesy of Valerie Morris)

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2. Needham (1932) has tried to show a relationship between these two groups by analysing biochemical evidences. Invertebrates have the **phosphogen** in the form of **arginine phosphate** whereas chordates usually have **creatine phosphate**. But the echinoids among echinodermata and hemichordates among Chordata have both **arginine phosphate** and **creatine phosphate**.



Arginine phosphate



Creatine phosphate.