Embryology teamwork

SAQs revision

Lecture 1: Development of Spinal Cord &vertebral Column

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| --- | --- |
| Structure  | Origin  |
| Neural tube  | **Ectoderm**  |
| Spinal cord  | **Caudal 2\3 of the neural tube**  |
| Grey matter of the spinal cord  | Mantle layer  |
| White matter of the spinal cord  | Marginal layer  |
| arachnoid mater &pia mater | **Ectoderm**  |
| Dura matter  | **Mesoderm**  |
| * Vertebral column
* ventromedial parts (sclerotomes) of the somites
* Somaits
* Para-axial mesoderm
 |
| ’nucleus pulposus | Notochord between the bodies of vertebrae  |
| Annulus fibrosus | Mesoderm |

Spina bifida: VERY IMPORTANT!!

|  |  |
| --- | --- |
| **Cause**  | **Failure of fusion of the halves of vertebral arches** |
| **Sex**  | **Female > male** |
|  **Types** |
| **Spina bifida occulta (20%)** | **Spin bifida cystica (80%)** |
| **Closed type**  | **Open type**  |
| **Only one vertebrae** **No clinical symptoms** **Skin is intact and sometimes covered by tuft of hairs**  | **Meningocoele****protrusion of sac containing :****meninges cerebrospinal fluid CSF** | **Meningomyelocoele****protrusion of sac containing:****meninges** **spinal cord and/or nerve roots** | **Myeloschisis****spinal cord is open due to failure of neural folds to develop**  |

Done by : Sarah Mohammed Aljasser