Embryology teamwork

SAQs revision

Lecture 1: Development of Spinal Cord &vertebral Column

|  |  |
| --- | --- |
| 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