Spina bifida occulta

- Small bony defect covered by skin
- Rarely diagnosed in utero
- Overlying soft tissue abnormalities
  - Subcutaneous lipoma
  - Tuft of hair
  - Skin dimple
- Usually asymptomatic

	SPINA BIFIDA OCCULTA	SPINA BIFIDA CYSTICA		
FIGURE 10–18	SPINA BIFIDA OCCULTA 	MENINGOCELE 	MYELOMENINGOCELE 	MYELOCELE 
	Failure of fusion of the posterior elements of the vertebrae.	The protruding sac contains meninges and spinal fluid.	The protruding sac contains meninges, spinal cord and spinal fluid.	Cystic cavity is in front of the anterior wall of the spinal cord.
	SPINA BIFIDA OCCULTA	MENINGOCELE	MYELOMENINGOCELE	MYELOCELE
POSTERIOR ELEMENTS OF SPINE	Failure of Fusion	Failure of Fusion	Failure of Fusion	Failure of Fusion
MENINGES HERNIATE AND FORM A CYSTIC SAC	No Cystic Sac Formation	Cystic Sac Formation Present	Cystic Sac Formation Present	Cystic cavity is in front of the anterior wall of the spinal cord
CONTENTS OF CYSTIC SAC	No Cystic Sac Formation	Spinal Fluid Meninges	Spinal Fluid Meninges Spinal Cord	
ASSOCIATED FINDINGS	A frequent sign in 50% of the children is the presence of: A pigmented nevus Angioma Hirsute patch Dimple or dermal sinus overlying skin	With or without intact skin at site of sac Incomplete skin coverage leads to leakage of CSF	📖 Arnold Chiari malformation which is complicated by hydrocephalus in over 90% of the cases—with or without intact skin at site of sac	
CLINICAL SYMPTOMS	No neurologic deficit Rarely associated with sacral Lipoma and tethered cord, therefore these children must be followed	In the absence of other underlying malformation, neurologic signs are normal, but children must be followed Meningocele occurs in <10% of cases of spina bifida cystica	Motor paralysis Sensory deficits Neurogenic bowel and bladder	
📖 SPINAL CORD LEVEL INVOLVED	Lumbosacral or sacral Region (most common level is L5 and S1 levels)	75% of these lesions affect the lumbar and lumbosacral segments. (The remainder are located in the thoracic or sacral area but only rarely at the cervical level)	75% of these lesions affect the lumbar and lumbosacral segments. (The remainder are located in the thoracic or sacral area but only rarely at the cervical level)	75% of these lesions affect the lumbar and lumbosacral segments. (The remainder are located in the thoracic or sacral area but only rarely at the cervical level)
POPULATION AFFECTED	Normal variant in approx. 5-10% of the population	Meningocele occurs in <10% of cases of spina bifida cystica	Myelomeningocele affects an overwhelming majority of the group with spina bifida cystica	

Spina bifida

- **Spina bifida occulta:** "Occulta" means hidden, and the defect is not visible. Spina bifida occulta is rarely linked with complications or symptoms. Spina bifida occulta is usually discovered accidentally when the person has an x-ray or MRI for some other reason. The prevalence of occulta is not known, but it is probably the most common type of spina bifida.
- **Meningocele:** The membrane that surrounds the spinal cord may enlarge, creating a lump or "This is often invisible through the skin and causes no problems. If the spinal canal is cleft, or "bifid," the cyst may expand and come to the surface. In such cases, since the cyst does not enclose the spinal cord, the cord is not exposed. The cyst varies in size, but it can almost always be removed surgically if necessary, leaving no permanent disability. This is an uncommon type of spina bifida.
- **Spina bifida cystica (myelomeningocele):** This is the most complex and severe form of spina bifida. Spina bifida cystica usually involves neurological problems that can be very serious or even fatal. A section of the spinal cord and the nerves that stem from the cord are exposed and visible on the outside of the body. Or, if there is a cyst, it encloses part of the cord and the nerves. This condition, which was documented 4000 years ago, accounts for most cases of true spina bifida.

- ***The term "spina bifida" often is used interchangeably with myelomeningocele, since this is the type of spina bifida that causes the vast majority of disability.***