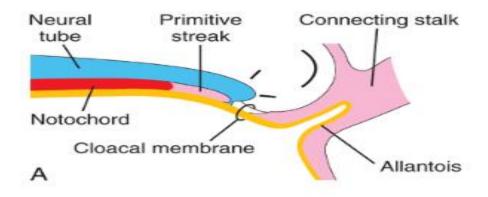
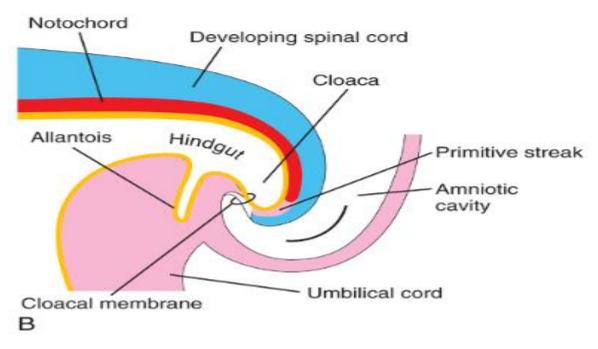
Allantois

★ It is a **tubular evagination** of the 2nd. yolk sac into the connecting stalk .

★ Development:

- During 3rd. week , the allantois develops as a tubular projection from the dorsi-caudal part of the 2nd. Yolk sac into the connecting stalk .
- **★ Parts and fate : It is formed of 2 parts :**
 - Intra-embryonic part :
 - > The proximal part: form the apex of urinary bladder.
 - The distal part, called urachus connect the urinary bladder to the yolk sac, is obliterated forming median umnilical ligament which extends from the apex of the bladder to the umbilicus.
 - Extra-embryonic part , inside the umbilical cord , become
 obliterated .
 - Allantoic vessels form the umbilical vessels.





★ Anomalies of urachus:

- 1- Persistence patency of whole length of urachus leads to **fistula** between the urinary bladder and umbilicus .
- 2- **Umbilical polyp:** due to persistence patency of the distal part of the urachus .
- 3- **Bladder diverticulum** due to persistence patency of proximal part of the urachus .
- 4- **Urachal cyst:** due to persistence patency of central part of the urachus .

