

## ANORECTAL MALFORMATION (ARM)

Spectrum of abnormalities of rectum/ anus possible – not only imperforate anus, it is a spectrum of abnormalities involving the rectum and anus.

Incidence: 1 – 4/ 5000 births

More common in males

Other malformations common (Acronym: VACTERL)

- V: **V**ertebral defects
- A: **A**norectal malformation/ other bowel **A**triesias
- C: **C**ardiac anomalies
- TE: **T**racheal-oesophageal fistula + **E**sophageal atresia
- R: **R**enal
- L: **L**imb defects

	<b>High Malformation</b>	<b>Low Malformation</b>
More common in	Males	Females
Type of fistula	Recto-urinary fistula	Recto-vestibular fistula
Meconium visible	Tip of penis, passing meconium via urethral orifice	In vagina
Perineal inspection	No fistula	Fistula to vestibulum or perineum
Clinical signs	Bowel obstruction after 1-2 days, abdominal distension Tiny or absent recto-urinary fistula allows little stools	No bowel obstruction Passing sufficient stools via fistula
Surgical management	3 stage procedure: <ol style="list-style-type: none"> <li>1. Colostomy</li> <li>2. 4 weeks later: Colostogram (distal loop-o-gram), then Posterior sagittal anorectoplasty (PSARP) Anal dilatation if needed</li> <li>3. Colostomy reversal</li> </ol>	No colostomy needed Anoplasty or ano-rectoplasty shortly after birth

### Initial Management

Treat as bowel obstruction

NPO, naso-gastric tube on free drainage

IV fluids to maintain normal hydration

Keep warm

Look for other abnormalities

Refer to paediatric surgeon

### Work-up in tertiary hospital

1. Clinical evaluation of perineum/ buttocks (flat bottom sign) – with experience you can determine if it is high or low malformation
2. Invert-o-gram – if in doubt if it is high or low lesion, should only be done in a tertiary hospital

Rule out associated congenital malformations (VACTERYL)

3. Babygram (look for bone abnormalities)

4. Screening sonar: heart, kidneys, abdomen, brain

### Conclusion

In a new-born child, do not discharge a baby before it has passed meconium, however, the presence of meconium does not prove that there is an anus, it may come from penis or vagina.

Do not forget to check the anus:

Is it there?

Is it in normal position?

Does it have normal configuration?