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| **MRI** | **PLANE** | **BASIC** | **Remarks** | **No. of Sequences/ Minimum Scan Time/In-Out Time** |
| **MR enterogrpahy** | **Prior to Buscopan injection** | | Patient to be kept nil orally at least 4 hours prior to study.  2 % Mannitol to be given orally.  **Preparing Mannitol solution:**  Use 20% (W/V) IV Mannitol bottle which is 100/500 ml in volume. Add 200ml Mannitol in water to make total volume to 2000 ml (you will therefore need 1800 ml water) - **this will produce 2 % Mannitol solution**.  **Administrating Mannitol solution to patient:** Give 1200ml to patient and ask him to drink all of it in next 45 minute (400 ml every 15 minutes). Give around 300 ml solution at table (total given 1500 ml).  **Scanning:** Patient scanned in prone position (preferred).  Buscopan to be given (double administration)  **C/I of Buscopan:**  Myasthenia Gravis, Megacolon. Narrow angle glaucoma. Tachycardia. Prostatic enlargement with urinary retention, GI obstruction and paralytic ileus.  **Post scan complication:**  *Mannitol* can cause diarrhea and excess abdominal cramps and intestinal gases for next 1-2 days.  *Buscopan* can cause blurred vision for about 30 minutes after the procedure- do not allow patient to go out of hospital for 30 minutes. | 7 sequences. |
| Axial | T2 True FISP( 4mm) |
| Coronal | T2 True FISP (4mm) |
| **After first IV Buscopan (0.5-1 ml as per body weight- 0.01 ml /kg) –wait 1 minute before next scan** | |
| Axial | T2-SSFSE/HASTE with fat sat(4mm) |
| Coronal | T1 Flash fat sat 3 D (0.9-1.0 mm)  ***(first sequence to acquire after Buscopan injection)***  T2-SSFSE/HASTE without fat sat (4mm) |
| **After Second IV Buscopan injection (same dose) Plus Injection Gadolinium)** | |
| Axial | T1 Flash fat sat 3 d (1- 1.5 mm) |
| Coronal | T1 Flash fat sat 3 D (0.9-1.0 mm) ***(first sequence to acquire after contrast injection)*** |

**Phases:**

**After first IV Buscopan (0.5-1 ml as per body weight- 0.01 ml /kg) –wait 1 minute before next scan**

Arterial: angio phase (for small bowel tumors)

Enteric phase: 45 sec (optional)

Poral venous: 60 sec (all cases)

Precontrast: Only if active bleeding suspected.