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| 144 | Abdomen & Pelvis – Plain (Acute Abdomen) |  | |
| **Purpose:**  Acute abdomen pain/ vomiting, trauma (IV contrast is usually required, intestinal obstruction (IV contrast may be required). If complication of hernia suspected and if abdominal ileus/ SBO is suspected use different protocol. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation |
| * Give 1.5-liter water over 90 minutes in equally spaced doses. Give 300-500 ml water on table stat. * If it is acute emergency and there is no time or if patient is unable to tolerate- water may be skipped- Proceed directly to scanning. * Discuss with radiologist if he prefers positive contrast then use same dose regime but with oral iodine-based contrast instead of water. |

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| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| Helical | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |

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| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |
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| 145 | Abdomen & Pelvis – Routine (-C/+C) |  | |
| **Purpose:**  Abdomen pain, weight loss of unknown origin, Abdomen symptoms of unknown origin. For complication of hernia, ischemic bowel disease / SBO and abdominal ileus different protocol. For specific protocol related to, anastomotic leak, pancreatic pathologies, adrenal pathologies, liver and renal pathologies use corresponding protocols. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation |
| * Contrast media preparation is required. 20-24G cannula is required. * Give 1.5 liter positive over 90 minutes in equally spaced doses. Give 300-500 ml on table stat. * Discuss with radiologist if he prefers water contrast then use same dose regime but with water contrast instead of iodine-based contrast. * Discuss with radiologist regarding need of contrast enema. * Technique if contrast enema is as follows:  First, 50 ml of Telebrix Gastro dissolved in 1 l of tepid water (1:20) in a colon bag. This bag was then placed 40 cm above the table level. A soft cannula was carefully placed rectally without inflating the balloon. The cannula was fixated when the patient turned to his or her back. A blank CT‐abdomen was made. Subsequently, the contrast slowly dripped in. In the vast majority of patients the colon could fill itself with 1 l of contrast. |

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| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 2.0-3.0cc/s | **Delay:** | 65s | | | |
| Portal Venous | Above diaphragm to below ischium | 65s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |

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| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |

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| 146 | Abdomen & Pelvis – -Non-Staging (2 Phase) |  | |
| **Purpose:**  Non-Staging CT. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required * Give 1.5 liter positive over 90 minutes in equally spaced doses. Give 300-500 ml positive contrast on table stat. * Discuss with radiologist if he prefers water contrast then use same dose regime but with water contrast instead of iodine-based contrast. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Late  Arterial | Whole Liver | Sure  Start | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Portal Venous | Above diaphragm to below ischium | 65s | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |

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| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |

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| 147 | Abdomen & Pelvis – Staging (3 Phase) |  | |
| **Purpose:**  Staging CT or screening CT to look for metastasis. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required * Give 1.5 liter positive over 90 minutes in equally spaced doses. Give 300-500 ml positive contrast on table stat. * Discuss with radiologist if he prefers water contrast then use same dose regime but with water contrast instead of iodine-based contrast. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Late  Arterial | Whole Liver | Sure  Start | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Portal Venous | Above diaphragm to below ischium | 65s | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |
| Delayed (optional) | Whole Liver | 180 sec | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | |

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| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |

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| 148 | KUB (Prone Position) |  | |
| **Purpose:**  Abdomen pain- renal colic. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation |
| * In KUB studies- bladder should be at least partially full (NOT too much full). * In KUB studies for renal colic –: scan in prone. |

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| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| Helical | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |
| * In KUB studies- the protocol is configured for prone positioning of the patient. |

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| 149 | CT Urography (IVU) |  | |
| **Purpose:**  Evaluation of KUB region for masses, infection and other pathologies of KUB region. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 20G cannula is required. * Give 1L water over 60 minutes in equally space 4 doses. * Urinary bladder is preferably partially full. Do not let patient empty bladder prior to exam. * To do not over distend bladder as patient might have to stay in scanning for up to 15 minutes. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 3.0cc/s | **Delay:** | 35s | | | |
| Cortico-Medullary | Kidneys only | 35s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Nephrogram | Above diaphragm to iliac crest | 70s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |
| Excretory | Diaphragm to below ischium | 15 minutes | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 8x3 (abdomen), MIP, VR | |

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| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  |  |  |  | | --- | --- | --- | --- | | 153 | Ca Rectum - Staging |  | | | **Purpose:**  Local staging of Ca rectum with evaluation of liver metastasis. | | | **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | | | Dual Scanograms | | 120kVp | 50mA |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Patient Preparation | | | | | | | | * Contrast media preparation is required. 18G cannula is required. * Give 1.5 L water over 90 minutes in equally spaced doses. * Giver water enema (500mL) on table and then perform scan. | | | | | | | | Scan Details | | | | | | | | Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV | | GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |  |  |  |  |  | | --- | --- | --- | --- | | Procedure & Reconstruction Details | | | | | Phase | Coverage | Timing | Reconstructions (mm) | | Plain | Above diaphragm to below ischium | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 5cc/s | **Delay:** | 35s | | | | | Late  Arterial | Whole Liver | 35s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | | | Portal Venous | Above diaphragm to below ischium | 65s | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |  |  | | --- | | Algorithm Details | | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | |

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| |  |  |  |  | | --- | --- | --- | --- | | 151 | Adrenal (Adrenal Adenoma) |  | | | **Purpose:**  Adrenal evaluation. | | | **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | | | Dual Scanograms | | 120kVp | 50mA |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Patient Preparation | | | | | | | | * Contrast media preparation is required. 20G cannula is required. * No Oral preparation required. | | | | | | | | Scan Details | | | | | | | | Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV | | GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |  |  |  |  |  | | --- | --- | --- | --- | | Procedure & Reconstruction Details | | | | | Phase | Coverage | Timing | Reconstructions (mm) | | Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 3..0 cc/s | **Delay:** | 50s | | | | | Phase 1 | Above diaphragm to iliac crest | 50s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | | | Phase 2  (wash out) | Upper abdomen only | 15mins | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |  |  | | --- | | Algorithm Details | | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | | Comments | | * If the HU value of the lesion in adrenal gland is < 10 HU in pre-contrast- stop scanning. * Proceed to next phase only if the attenuation of the lesion is > 10 HU. | |

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| 152 | Pancreas (Acute Pancreatitis/Pancreatic Mass) |  | |
| **Purpose:**  Evaluation of pancreatic pathology. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * Use 500mL – 1L **wate**r. Give it over 30mins. Skip if patient cannot tolerate. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0cc/s | **Delay:** | 35s | | | |
| Pancreatic Phase | Above diaphragm to iliac crest | 35s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. |  | |
| Portal Venous | Above diaphragm to iliac crest | 65s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |

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| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |
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| 150 | Liver (Lesions, Cirrhosis, HCC) |  | |
| **Purpose:**  Liver mass evaluation, screening of HCC, post TACE, prior to liver transplant. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * Use 500mL – 1L water. Give it over 30mins. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 5cc/s\*\* | **Delay:** | SureStart | | | |
| Late Arterial | Whole liver | Sure  Start | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Portal Venous | Above diaphragm to below ischium | 65s | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. |  | |
| Delay | Whole liver | 180s | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | | Cor. | 2x2 (abdomen) | | Sag. |  | |
| Delay 2 (optional) | Whole liver | 600s | |  |  | | --- | --- | | Ax. | 3x2 (abdomen) | |

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| Algorithm Details |
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| Comments |
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| 156 | Renal Injury + CT Cystogram |  | |
| **Purpose:**  Blunt trauma od abdomen with suspected renal and bladder injury. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * No oral contrast to be given. * Urinary bladder catheter must be in place from ER. Install 300-500 mm diluted contrast solution (50 ml Iodine based contrast diluted in 450 ml). Use only gravity for administrating the contrast in to bladder. * Clamp catheter initially to take pre-contrast scan. Then unclamp the catheter for post evacuation scan. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4-5.0cc/s | **Delay:** | SureStart | | | |
| Arterial | Above diaphragm to below ischium | Sure Start | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Portal Venous | Above diaphragm to below ischium | 70s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. |  | |
| Distend Bladder with contrast and clamp catheter | Above diaphragm to below ischium | 15mins | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Empty Bladder | Pelvis only | Post Void | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |

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| 154 | Abdominal Trauma (Blunt, Penetrating, Polytrauma) |  | |
| **Purpose:**  Blunt trauma if no significant/specific suspicion of urinary bladder injury or renal injury, Penetrating abdomen injuries and polytrauma. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * Routinely oral contrast is not needed. Needed only if penetrating injury and suspected bowel perforation. * If requested by radiologist, give 1.5-liter positive contrast over 60 minutes in equally spaced 4 doses+ Give 300-500 ml positive contrast on table stat. * D/W radiologist regarding need for contrast enema. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Arterial | Above diaphragm to below ischium | Sure Start | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |
| Portal Venous | Above diaphragm to below ischium | 70s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |
| Delayed | Above diaphragm to below ischium | 180sec | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. |  | | Sag. |  | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |
| * If the chest is to be included in the study; add the chest to the portal venous (70s) phase. |

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| 155 | Abdominal ileus/SBO |  | |
| **Purpose:**  For suspected SBO. Must rule out of strangulation. Also same protocol in complicated hernias. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * Give 1.5-liter water over 90 minutes in equally spaced doses. DO not use positive contrast unless specifically requested and unless there is no concern of bowel wall ischemia /strangulation. * IF it is acute emergency and there is not time- water contrast may be skipped- proceed directly to scanning. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Late Arterial | Above diaphragm to below ischium | 35 | |  |  | | --- | --- | | Ax. | 2x2(abdomen) | | Cor. | 5X3 (thick slab) | | Sag. |  | |
| Portal Venous | Above diaphragm to below ischium | 65s | |  |  | | --- | --- | | Ax. | 2x2 (abdomen) | | Cor. | 3x3 (abdomen) | | Sag. | 3x3 (abdomen) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | CTA |  | FC08 |  | AIRD 3D STND |  | OFF |  | On | |
| Comments |
| * Mesenteric angiography may be added in specific cases if need- d/w radiologist. |

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| 157 | Mesenteric CTA |  | |
| **Purpose:**  Mesenteric angiography for bowel bleeding, ischemic bowel. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * Give 1.5-liter water over 90 minutes in equally spaced doses. DO no use positive contrast unless specifically requested and unless there is no concern of bowel wall ischemia /strangulation. * IF it is acute emergency and there is not time- water contrast may be skipped- proceed directly to scanning. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

|  |  |  |  |
| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 3x3 (abdomen) | |

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|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Arterial | Above diaphragm to below ischium | Sure Start | |  |  | | --- | --- | | Ax. | 1x1 (CTA),3x3 (abdomen) | | Cor. | 2x2 (CTA) | | Sag. | 2x2 (CTA) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | CTA |  | FC08 |  | AIRD 3D STND |  | OFF |  | On | |
| Comments |
| * VR, MIPs, and Curved vessel views to be included in post processing. |

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| 158 | Abdominal Aorta CTA |  | |
| **Purpose:**  To evaluated aortic dissection, aneurysms, penetrating atherosclerotic ulcers and post-operative or preoperative assessment. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the pubic symphysis. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| GG-Hel | 0.5 x 80 | HP Standard | 120 | R\*\*\* | Quality | L |

|  |  |  |  |
| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 3x3 (abdomen) | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Arterial | Above diaphragm to below ischium | Sure Start | |  |  | | --- | --- | | Ax. | 1x1 (CTA),3x3 (abdomen) | | Cor. | 2x2 (CTA) | | Sag. | 2x2 (CTA) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | CTA |  | FC08 |  | AIRD 3D STND |  | OFF |  | On | |
| Comments |
| * VR, MIPs, and Curved vessel views to be included in post processing. |

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| 159 | Renal CTA (Volume) |  | |
| **Purpose:**  To evaluate the renal vessels for aneurysm, stenosis and blood flow. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire abdomen from the diaphragm to the iliac crest. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation | | | | | | |
| * Contrast media preparation is required. 18G cannula is required. * Oral contrast is not needed; however, good hydration of patient is preferred. | | | | | | |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| W-Volume | 0.5 x 80 | HP STND | 120 | R\*\*\* | Quality | L |

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| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above diaphragm to iliac crest | - | |  |  | | --- | --- | | Ax. | 3x3 (abdomen) | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Volume:** | 100cc | **Rate:** | 4.0-5.0cc/s | **Delay:** | SureStart | | | |
| Arterial | Above diaphragm to below ischium | Sure Start | |  |  | | --- | --- | | Ax. | 1x1 (CTA) | | Cor. | 1x1 (CTA) | | Sag. | 2x2 (CTA) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Abdomen | Kernel | FC08 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | CTA |  | FC08 |  | AIRD 3D STND |  | OFF |  | On | |
| Comments |
| * VR, MIPs, and Curved vessel views to be included in post processing. |

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| 192 | Lumbar Spine |  | |
| **Purpose:**  To evaluate lumber spine diseases, fracture, and bone lesions. | |
| **Instructions:**  Use the image on the right as a guide. Cover the entire lumbar spine. | |
| Dual Scanograms | | 120kVp | 50mA |

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| Patient Preparation |
| * Remove radio opaque materials in the chest, abdomen, and pelvis. |

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| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| W-Volume | 0.5 x 80 | - | 120 | R\*\*\* | Spine HQ | M |

|  |  |  |  |
| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | T10 to Sacro-coccygeal junction | - | |  |  | | --- | --- | | Ax. | 1x1 (spine)(Soft) | | Cor. | 3x3 (spine) | | Sag. | 3x3 (spine)(soft) | |

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| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Spine | Kernel | FC35 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | Soft |  | FC09 |  | AIDR 3D STND |  | OFF |  | On | |
| Comments |
| * Use “SEMAR” version of the protocol when metallic implants are present. * VR and 3D post-processing for all implants is required. * Oblique-Axial views at each disc level are required. |

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| 194 | Sacrum / Coccyx |  | |
| **Purpose:**  To evaluate fracture, and bone lesions. | |
| **Instructions:**  Use the image on the right as a guide. | |
| Dual Scanograms | | 120kVp | 50mA |

|  |
| --- |
| Patient Preparation |
| * Remove radio opaque materials in the chest, abdomen, and pelvis. |

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| --- | --- | --- | --- | --- | --- | --- |
| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| W-Volume | 0.5 x 80 | - | 120 | R\*\*\* | Spine HQ | M |

|  |  |  |  |
| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Cover entire structure | - | |  |  | | --- | --- | | Ax. | 1x1 (spine)(Soft) | | Cor. | 3x3 (spine) | | Sag. | 3x3 (spine)(soft) | |

|  |
| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Spine | Kernel | FC35 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | | Soft |  | FC09 |  | AIDR 3D STND |  | OFF |  | On | |
| Comments |
| * Use “SEMAR” version of the protocol when metallic implants are present. * VR and 3D post-processing for all implants is required. |

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| 195 | Bony Pelvis |  | |
| **Purpose:**  To evaluate fracture, and bone lesions. | |
| **Instructions:**  Use the image on the right as a guide. | |
| Dual Scanograms | | 120kVp | 50mA |

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| --- |
| Patient Preparation |
| * Remove radio opaque materials in the chest, abdomen, and pelvis. |

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| Scan Details | | | | | | |
| Mode | Beam | Pitch | kVp | mA | Sure Exp. 3D | FOV |
| Helical | 0.5 x 80 | HP Detail | 120 | R\*\*\* | Spine HQ | L |

|  |  |  |  |
| --- | --- | --- | --- |
| Procedure & Reconstruction Details | | | |
| Phase | Coverage | Timing | Reconstructions (mm) |
| Plain | Above the iliac crest to below ischium | - | |  |  | | --- | --- | | Ax. | 0.5x0.5 (bone) | | Cor. | 3x3 (bone) | | Sag. | 3x3 (bone) | |

|  |
| --- |
| Algorithm Details |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Bone | Kernel | FC35 | Filter | AIDR 3D STND | Boost | OFF | OSR | On | |
| Comments |
| * Use “SEMAR” version of the L-spine protocol when metallic implants are present. * VR and 3D post-processing for all implants is required. |