SERIOUS SEATBELT INJURIES Study Australian Paediatric Surveillance Unit

Abdominal Injuries Severity Scale

Splenic injury scale

Grade I Hematoma: Subcapsular, nonexpanding, <10% surface area

Laceration: Capsular tear, nonbleeding, <1 cm parenchymal depth

Grade II Hematoma: Subcapsular, nonexpanding, 10-50% surface area; intraparenchymal, nonexpanding, <2 cm

in diameter

Laceration: Capsular tear, active bleeding; 1-3 cm parenchymal depth that does not involve trabecular

vessel

Grade III Hematoma: Subcapsular, >50% surface area or expanding; ruptured subcapsular hematoma with active

bleeding; intraparenchymal hematoma >2 cm or expanding

Laceration: >3 cm parenchymal depth or involving trabecular vessel

Grade IV Hematoma: Ruptured intraparenchymal hematoma with active bleeding

Laceration: Laceration involving segmental or hilar vessels producing major devascularisation (>25% of

spleen)

Grade V Laceration: Completely shattered spleen

Vascular: Hilar vascular injury that devascularizes spleen

Liver injury scale

Grade I Hematoma: Subcapsular, nonexpanding, <10% surface area

Laceration: Capsular tear, nonbleeding, <1 cm parenchymal depth

Grade II Hematoma: Subcapsular, nonexpanding, 10%-50% surface area; intraparenchymal, nonexpanding, <2

cm in diameter

Laceration: Capsular tear, active bleeding; 1-3 cm parenchymal depth, <10 cm in length

Grade III Hematoma: Subcapsular, >50% surface area or expanding; ruptured subcapsular hematoma with active

bleeding; intraparenchymal hematoma >2 cm or expanding

Laceration: >3 cm parenchymal depth

Grade IV Hematoma: Ruptured intraparenchymal hematoma with active bleeding

Laceration: Parenchymal disruption involving 25-50% of hepatic lobe

Grade V Laceration: Parenchymal disruption involving >50% of hepatic lobe

Vascular: Juxtahepatic venous injuries (i.e., retrohepatic vena cava / major hepatic veins)

Grade VI Vascular: Hepatic avulsion

Renal injury scale

Grade I Contusion: Microscopic or gross hematuria; urologic studies normal

Hematoma: Subcapsular, nonexpanding without parenchymal laceration

Grade II Hematoma: Nonexpanding perirenal hematoma confined to renal retroperitoneum

Laceration: <1 cm parenchymal depth of renal cortex without urinary extravasation

Grade III Laceration: >1 cm parenchymal depth of renal cortex without collecting system rupture or urinary

extravasation

Grade IV Laceration: Parenchymal laceration extending through the renal cortex, medulla, and collecting system

Vascular: Main renal artery or vein injury with contained hemorrhage

Grade V Laceration: Completely shattered kidney

Vascular: Avulsion of renal hilum, which devascularizes kidney

Duodenum injury scale

Grade I Hematoma: Involving single portion of duodenum

Laceration: Partial thickness, no perforation

Grade II Hematoma: Involving more than one portion

Laceration: Disruption <50% of circumference

Grade III Laceration: Disruption 50-70% circumference D2; Disruption 50-100% circumference D1, D3, D4

Grade IV Laceration: Disruption >75% circumference of D2; involves ampulla or distal common bile duct

Grade V Laceration: Massive disruption of duodenum-pancreatic complex

Vascular: Devascularisation of duodenum