

--

Study #

Site #

Patient #

Pancreatic Injury

This form to be completed on all patients with pancreatic injuries documented on Form 6b.

This form asks questions about different methods that may be used to diagnose a pancreatic injury. Please answer “Yes” or “No” to whether the patient had the diagnostic test or not. The form finally asks if the pancreas is injured in more than one location and if there were any complications. There are a total of 10 parent questions. Please answer all 10 and if the answer is “Yes” to any of the parent questions, please answer all the sub-questions as outlined below.

If the patient did have the diagnostic test, then answer if that test demonstrated evidence of pancreatic injury. If it did, answer the two sub-questions about the grade of injury and status of the pancreatic duct. If you would like to review the manuscript that the injury grades are based on see - Moore EE, et al: Organ injury scaling II: pancreas, duodenum, small bowel, colon and rectum. *J Trauma* 30:1427, 1990. The grades of pancreatic injury are listed below. If the patient has more than one injury to the pancreas, simply document the highest grade of injury.

Definitions of AAST grades for Pancreatic injuries

- | | |
|-----------|--|
| Grade I | Hematoma: Minor contusion without duct injury
Laceration: Superficial laceration without duct injury |
| Grade II | Hematoma: Major contusion without duct injury or tissue loss
Laceration: Major laceration without duct injury or tissue loss |
| Grade III | Laceration: Distal transection or parenchymal injury with duct injury |
| Grade IV | Laceration: Proximal transection or parenchymal injury involving ampulla
(Proximal pancreas is to the patients’ right of the superior mesenteric vein.) |
| Grade V | Laceration: Massive disruption of pancreatic head |

Please make your best attempt to grade the injury based on the particular imaging/diagnostic test.

Please contact the PI (jfholmes@ucdavis.edu) with any questions.

--

Study #

Site #

Patient #

1. Did the patient have a laparotomy/laparoscopy: ☐ Yes ☐ No

If Yes, did the patient have a pancreatic injury at laparotomy/laparoscopy:

☐ Yes ☐ No

If the patient had a pancreatic injury at laparotomy/laparoscopy, please answer questions A and B.

A) Grade of injury at laparotomy/laparoscopy Injury grades provided on 1st page of this form.

☐ AAST Grade 1 or 2 (classify further below if information available)

☐ AAST Grade 1

☐ AAST Grade 2

☐ Unclear if Grade 1 or Grade 2

☐ AAST Grade 3, 4 or 5 (classify further below if information available)

☐ AAST Grade 3

☐ AAST Grade 4

☐ AAST Grade 5

☐ Unclear if Grade 3, 4, or 5

☐ Unable to determine pancreatic injury grade by laparotomy/laparoscopy report

☐ Only traumatic finding at laparotomy/laparoscopy is fluid around the pancreas

B) Pancreatic duct status based on laparotomy/laparoscopy note:

☐ Duct transected

☐ Duct not transected

☐ Duct status indeterminate despite clear mention of attempt at ascertainment

☐ Attempt at ascertaining duct status not mentioned in laparotomy/laparoscopy report or medical record

--

Study #

Site #

Patient #

2. Did the patient have an abdominal CT scan? ☐ Yes ☐ No:

If Yes, was there evidence of pancreatic injury on CT scan: ☐ Yes ☐ No

If yes, answer questions A and B on the grade of pancreatic injury based on findings on the CT. You may ask your site radiologist for assistance if necessary.

A. Grade of pancreatic injury on CT scan Injury grades provided on 1st page of this form.

☐ AAST Grade 1 or 2 (classify further below if information available)

☐ AAST Grade 1

☐ AAST Grade 2

☐ Unclear if Grade 1 or Grade 2

☐ AAST Grade 3, 4 or 5 (classify further below if information available)

☐ AAST Grade 3

☐ AAST Grade 4

☐ AAST Grade 5

☐ Unclear if Grade 3, 4, or 5

☐ Unable to determine pancreatic injury grade by CT (try to avoid this answer)

☐ Only CT finding is fluid around the pancreas

B) Pancreatic duct status based on CT:

☐ Duct transected

☐ Duct not transected

☐ Duct status indeterminate on CT

☐ No mention of duct status on CT

--

Study #

Site #

Patient #

3. Did the patient have a MRI? ☐ Yes ☐ No:

If Yes, was there any evidence of pancreatic injury on MRI: ☐ Yes ☐ No:

If yes, answer questions A and B on the pancreatic injury based on findings on the MRI. You may ask your site radiologist if needed.

A) Grade of pancreatic injury on MRI Injury grades provided on 1st page of this form.

- ☐ AAST Grade 1 or 2 (classify further below if information available)
 - ☐ AAST Grade 1
 - ☐ AAST Grade 2
 - ☐ Unclear if Grade 1 or Grade 2
- ☐ AAST Grade 3, 4 or 5 (classify further below if information available)
 - ☐ AAST Grade 3
 - ☐ AAST Grade 4
 - ☐ AAST Grade 5
 - ☐ Unclear if Grade 3, 4, or 5
- ☐ Unable to determine pancreatic injury grade by MRI (try to avoid this answer)
- ☐ Only MRI finding is fluid around the pancreas

B) Pancreatic duct status based on MRI: ☐ Duct transected ☐ Duct not transected

- ☐ Duct status indeterminate on MRI
- ☐ No mention of duct status on MRI

4. Did the patient have an ERCP (Endoscopic Retrograde Cholangiopancreatography)? ☐ Yes ☐ No

If Yes, was there any evidence of pancreatic injury on ERCP: ☐ Yes ☐ No

If yes, document the grade of pancreatic injury (A) and duct status (B) based on findings on the ERCP. You may ask your site radiologist if needed.

A) Grade of pancreatic injury on ERCP Injury grades provided on 1st page of this form.

- ☐ AAST Grade 1 or 2 (classify further below if information available)
 - ☐ AAST Grade 1
 - ☐ AAST Grade 2
 - ☐ Unclear if Grade 1 or Grade 2
- ☐ AAST Grade 3, 4 or 5 (classify further below if information available)
 - ☐ AAST Grade 3
 - ☐ AAST Grade 4
 - ☐ AAST Grade 5
 - ☐ Unclear if Grade 3, 4, or 5
- ☐ Unable to determine pancreatic injury grade by ERCP

B) Pancreatic duct status based on ERCP: ☐ Duct transected ☐ Duct not transected

- ☐ Duct status indeterminate on ERCP
- ☐ No mention of duct status on ERCP

--

Study #

Site #

Patient #

5. Did the patient have elevated (above the normal level at your site)

pancreatic enzymes (Amylase or Lipase): ☐ Yes ☐ No

(if yes, answer 5a and 5b):

5a. Please list the highest measured lipase and date/time that the peak lipase was obtained (within 96 hours of ED arrival):

Highest lipase: _____ Date and time of highest lipase: __/__/__ ____:____ 24 hour clock

☐ No lipase measured during the ED or hospitalization

5b. Please list the highest measured amylase and date/time that the peak lipase was obtained (within 96 hours of ED arrival):

Highest amylase: _____ Date and time of highest lipase: : __/__/__ ____:____ 24 hour

☐ No amylase measured during the ED or hospitalization

6. Was the pancreatic injury identified solely by clinical suspicion of the treating physician (patient had normal amylase/lipase and normal pancreas on CT scan and or

surgery): ☐ Yes ☐ No

If "Yes" provide text for the reasons the patient was diagnosed with a pancreatic injury:

--

Study #

Site #

Patient #

7. Did the patient have an autopsy: ☐ Yes ☐ No

If Yes, was there any evidence of pancreatic injury at autopsy: ☐ Yes ☐ No

If yes, document the grade of pancreatic injury and duct status based on the autopsy.

A) Grade of pancreatic injury on autopsy Injury grades provided on 1st page of this form.

- ☐ AAST Grade 1 or 2 (classify further below if information available)
 - ☐ AAST Grade 1
 - ☐ AAST Grade 2
 - ☐ Unclear if Grade 1 or Grade 2
- ☐ AAST Grade 3, 4 or 5 (classify further below if information available)
 - ☐ AAST Grade 3
 - ☐ AAST Grade 4
 - ☐ AAST Grade 5
 - ☐ Unclear if Grade 3, 4, or 5
- ☐ Only autopsy finding was fluid around the pancreas

B) Pancreatic duct status based on autopsy:

- ☐ Duct transected
- ☐ Duct not transected
- ☐ Duct status indeterminate on autopsy
- ☐ No mention of duct status on autopsy

8. Pancreatic injury identified by other means ☐ Yes ☐ No

If yes, list method: _____

- ☐ AAST Grade 1 or 2 (classify further below if information available)
 - ☐ AAST Grade 1
 - ☐ AAST Grade 2
 - ☐ Unclear if Grade 1 or Grade 2
- ☐ AAST Grade 3, 4 or 5 (classify further below if information available)
 - ☐ AAST Grade 3
 - ☐ AAST Grade 4
 - ☐ AAST Grade 5
 - ☐ Unclear if Grade 3, 4, or 5

--

Study #

Site #

Patient #

9. Was the pancreas injured in more than one location:

☐ Yes ☐ No ☐ Unclear if the pancreas was injured in >1 location

10. Pancreatic complications (check all that apply):

☐ None

☐ Pancreatic fistula (drainage of more than 70 ml for more than 5 days of amylase-rich fluid)

☐ Pseudocyst

○ Pseudocyst drained: ☐ Yes ☐ No

▪ Laparotomy to drain pseudocyst: ☐ Yes ☐ No

▪ Interventional radiology drained pseudocyst: ☐ Yes ☐ No

☐ Peripancreatic abscess

○ Abscess drained: ☐ Yes ☐ No

▪ Laparotomy to drain abscess: ☐ Yes ☐ No

▪ Interventional radiology drained abscess: ☐ Yes ☐ No

☐ Leak from pancreatico-enteric anastomosis

○ Repeat operation to repair leak: ☐ Yes ☐ No

☐ Bleeding (post-laparotomy) from pancreas

○ Repeat operation for pancreas bleeding: ☐ Yes ☐ No

☐ Traumatic pancreatitis

☐ Death from pancreatic injury

☐ Sepsis from the pancreatic injury

☐ Other complication from the pancreatic injury not listed above:
describe: _____