“Peripancreatic stranding”

What is that?
Conclusion:
“Stranding” is a misnomer.

What we think is “stranding” is actually electronic noise from the scanner associated with FBP and iDose reconstructions. With IMR the “stranding” instead changes into the shape of fluid/edema. “Fluid/edema” are better descriptors than “stranding” as they refer to the patient and not to the image!
If you do not know what you see you **describe** what you see!

If you see “**stranding**” with pancreatitis you then report “**peripancreatic stranding**”!

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**RADIOLOGY TRADITION**

*Imaging Acute Pancreatitis*


Fig 2.

“Peripancreatic inflammation results in hazy or reticular **stranding** of the surrounding fat.”
If you see a “hazy or reticular” pattern you call it stranding. Logical.

But, what if “hazy and reticular” only is noise. Then you fill your report with a description of the electronic noise from the scanner. That cannot be correct. Right?!

Fig 2. “Peripancreatic inflammation results in hazy or reticular stranding of the surrounding fat.”

Imaging Acute Pancreatitis
Acute Pancreatitis

Note absence of “stranding” with IMR!

iDose 4
Slice thickness 4 mm

IMR 3 Soft Tissue
Slice thickness 1 mm
“Stranding” is present even with iDose level 6, the highest level of noise reduction using iDose. Stranding is present even with 4 mm slice thickness.
Compare tissues around duodenum and between duodenum and pancreas

iDose 6
Slice thickness 4 mm

IMR 3 Soft Tissue
Slice thickness 1 mm

It seems inappropriate to use “hazy reticular stranding” with IMR. Some other language is needed.

How about “fluid and edema”? 
Coronal reformats

With iDose
Evaluate the abnormal peripancreatic tissue typically referred to as “stranding”

With IMR
The abnormal peripancreatic has appearance of water and may well be described as “fluid” or “edema” instead.
IMR with minimal noise

There is no “haziness” or “reticular pattern” around the pancreatic head.

Instead there is quite well visualized denser peripancreatic tissue close to the pancreas and less dense tissue more peripherally where finally the omental fat is clear.
Conclusions

• “Stranding” is a misnomer. It is just noise.
• “Fluid/edema” are better descriptors.
• IMR can depict several different tissue densities in the peripancreatic region which should be further explored.
• Can we perhaps improve our characterization of pancreatitis?