ORAL CONTRAST IN TRAUMA CT

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Abdominal trauma CT examinations are notoriously difficult to read. Solid organ injuries are highlighted with intravenous contrast. Hollow organ injuries and subtle free pathological fluid collections are often very challenging to detect. Oarl contrast (OC) has been used for more than a decade and has been very helpful in delineating the intestinal and mesenteric anatomy, detect signs of injury and eventually reveal full thickness wall injuries showing extra-intestinal contrast leakage.

Is it potentially dangerous to use OC? Several reports have stated that there is no evidence of increased risk using OC. - Does OC opacify the intestines? In most cases the OC opacifies most of the small intestine. Does the use of OC lead to delay? It is possible to avoid any delay due to the use of OC and it must be stressed that delay in the treatment of the patient is unacceptable.

Numerous reports deal with bowel and mesenteric injuries. In the last 2 decades there is an amazing range of reported incidence of bowel and mesenteric injuries in abdominal trauma populations (0.5 to 8.5 %). This is not the case in the reported incidence of solid organ injuries.

OC is used in about 50% of trauma centers and there has been a correlation between the use of OC and the incidence of detected bowel injuries. I noted a significant increase in the number of injuries when OC was introduced. A work shop in 2001 dealing with these injuries showed that dept,s using OC had a significant higher incidence. Cases where OC is essential will be presented and discussed.

During the last few years a substantial amount of single, 2-4 slice CT scanners have been replaced by 16-40-64-? MDCT-machines. The quality of imaging has been increased substantially with thin slices and extremely improved reconstruction possibilities. In this context the future use of - and need for OC is discussed and the recent litterature is up-dated.