SUMMARY AND CONCLUSION

The intra-abdominal masses and fluid collections are considered some of the commonest problems encountered in the practical radiology. The CT-guided percutaneous abdominal interventions provided simple, safe and valid procedures which can substituted the surgical interference.

Malignancy is still a serious problem in most parts of the world due to the very high rate of mortality up till now, we cannot prevent cancer, but we can prevent further deaths due to cancer lesions if early detected. The accurate diagnosis and effective treatment have become easier with the application of the recent technology. This work was presented to demonstrate the diagnostic role of CT guided percutaneous biopsy in malignancy as well as therapeutic drainage of abdomino-pelvic collections.

Biopsy provides the specificity required for etiologic diagnosis. CT guided percutaneous biopsy is most commonly used nowadays, as a relatively simple invasive procedure with little morbidity. It is a technically simple raid and accurate procedure. In addition, it is less costly and safer than surgical biopsy.

Virtually any accessible localized lesion in any organ of the body can be investigated by CT guided percutaneous biopsy, which is considered most useful in patients with suspected malignant disease or loculated & free collection.

We studied the feasibility and the effectiveness of CT guided percutaneous biopsy in detection or exclusion of malignancy and our results showed that it is a feasible and effective procedure. Additionally, CT guidance offers several advantages:

1. Very sensitive in detecting small lesions.
2. The most accurate method for needle guidance.
3. Allows direct visualization of the needle tip.
4. Good definition of the lesion's vascularity.
5. Uninfluenced by gas shadows in the bowel loops.
6. Early detection of complications.

In this study we intended to evaluate the practical accuracy and validity of CT-guided percutaneous intervention techniques in diagnostic and therapeutic terms.

In the course of this work we described the general principles of CT guidance as regards the biopsy needles and draining catheters. We also described the CT features of intrabdominal masses and fluid collections in different anatomical sites and reviewed the works of other authors who dealt this subject.

All patients underwent abdomino-pelvic CT examinations.

The patients underwent CT-guided percutaneous interventions and were classified into diagnostic and therapeutic groups.

Group (A) : Diagnostic CT guided biopsy of abdomino-epvic masses (60 cases):

These cases were identified as having accesible abdominal masses and classified according to their anatomical sitesd into groups. The specimens were obtained with different needle gauges. They were processed and evaluated as regards the validity according to the histopathological score.

This study shows that the use of biopsy trigger (Biopsy gun) is a more expeditious technique resulting in (100%) success rate.

Our work showed a diagnostic accuracy (96.7%), two cases (3.3%) failed specimens (not representative specimens). Our study revealed (100% sensitivity, specificity and predictive diagnostic value.

Group (B) : Therapeutic CT guided aspiration & drainage of abdomino-pepvic fluid collections (40 cases):

This study involved (40) cases that suffered from intra-abdominal fluid collections. To obtain successful drainage of an abscess; the latter must be accessible, unilocular, well defined and have mature wall. The draining catheter route must be clear, short and not transverse sterile spaces. Moreover, the post-procedural potent antibiotics should be used properly. The trocar method (single step) was used successfully for draining (13 cases) who had superficial and large intra-abdominal fluid collections. The Seldinger technique (guide wire-exchange method) was used successfully for draining (5 cases) while catheter draiange was used for the rest of cases. This study reveals (100%) success rate and

therapeutic validity of these techniques. The high therapeutic outcome was shown as regards the resolution of abscesses and both clinical, laboratory improvement of the patients. This study also enhances the feasibility of interventional CT guided drainage techniques.

85% of cases underwent successful percutaneous drainage with resolution of abscess cavities & clinical improvements through 2weeks follow up study. 10% of cases were surgically underlying billiary tree injury & recurrence while 5% of cases escaped follow up study.

Concerning diaggnostic biopsy group 65% of cases were subjected for radiotherapy regimen, 8.3% underwent surgical procedures, 4% shows complete resolution after therapy as inflammatory pseudomass lesion while 20% of cases escaped follow up.

It is concluded that as regard guidance modalities CT provides the most acuurate methode for guiding percutaneous needle biopsy and drainage.