Uses of computed tomography in the dlagnosis of liver masses

Abd Elhamid Abd Elnaby Nofal

Computed tomogrophy is a new method of f’o r.n.Ln gLna,;;”s from x-rays and was developed and introducedinto clinical use by the British 2hysicist GoodfreyHounsfield in 1973.Co.npu t ed body tomogra,Jny on the o t nez- hand,is still experiencine; the growing pains 0;:’ any ne,diasnostic .net.rc d, Its indication and ef.·iciency a reless well defined t,w.,’Lthe cranial co.npu ted to.nogl’’-)ilj.Irhe d.iscovery of co.n,uted to.~:ogl’a)i.1Y pLays an..et t ve ro Le in tne diagnosis of liver diseo.ses Genera-Ily un.l dif fe::’cll t liyer mas c e s es~)ecially.”d vantll;;es oi’ CT body scanning:-1- It is an accurate, oojc ct Lve and nOll-invasiveiinaging .net’iod.2- It provides acocll)lete cz-o ss sectional imagewhich can per.ai, t an accurate assesillent of .Jc-’ne prl•marylesion as well as detailed involvement of other orGans.J- .eor detection of :~,etastatic lesion of theliver, ..;’r scanning .nay be as accurate as a technetiumisotope scan,,,:oreover, tnere is .uore specifici tj in de ter:aing thecystic nature of such lesions.4- For the de;ection of obstructive jaundice, CT isac cu ra te and certc;.iEly less danGerous than in travenouscholanc;iogra.,hy.Disadvan taijeS of Gir scanning:-1- Radiation dosage to the patients is .ao re significantt nan that of the non-ioniZing beam used in ul trasonography.2- :rhe cost of 011 is so.ne-wne c hi{):.er t nan of uLt i-asound.)_ ’rhere has been ao.ne diffic:ulty in::xaJinin,; very thin..-lith subsec;uent difficulty to out Li.ne tole punc reas .4- In very u.i..n ,Je.tients with siJ1ificant intestinal.nove.nent and intestinal -.;as, ar t Lf’ac t a ,aay be seenmaking the interpretation difficult.5- In mB..’1Ycases, a .nas s produced by an inflanLllatoryreaction is difficult to be difi:r:ontiated frotathat caused by a neopla~n.COil1;JU ted t omogz-aphy has proved to be of ahigh degree of accuracy in the dia~losis of :ivermasses eJpecially _iver cysts.1,;Ostprevious studies cornpa r.Lng co.aju t edtomogra,t>hyto other diagnostic iiuaging .nodaLftie3,such as ultrasound or radionuclide imaging, show thatco.nput ed tomogra,;hy is more accuru te tho..”1the otherconventional i;nac;ing techniques for detecting focalle sions 0 f Lc.nor ;;1’e ute r in si ze.It is found that (CT) is useful in thediagnosis and localization of abdo.ui.naL abscesses andthe use of percutaneous aspiration of abdominal a.;scessesunder its control.