

## ■ お詫び訂正

教育講演 2「消化管の画像診断」 2. 上部内視鏡 の抄録におきまして伊牟田真功先生から頂いた原稿とは異なる抄録が掲載されております。 また、教育講演 1 5「口腔，下顎・上顎骨の画像診断」 2. 疾患 の抄録におきましても 1 か所誤植がございました。

ご執筆頂きました伊牟田先生，木村先生へ深くお詫び申し上げますとともに，下記のように訂正いたします。

### ○教育講演 2「消化管の画像診断」

#### 2. 上部内視鏡 伊牟田 真功（熊本大学 画像診断・治療科）

内視鏡は消化管疾患の診断には必要不可欠な検査法である。内視鏡観察の方法としては白色光による通常観察の他，色素法，超音波内視鏡などがあるが，最近では内視鏡機器の発達により様々な新しい観察法が開発され，臨床に応用されている。主なものとしては NBI (Narrow Band Imaging) などに代表される画像強調観察や拡大内視鏡観察があり，病変の視認性や表面微細構造，微小血管観察の向上が可能となった。腫瘍性病変については良悪性の質的診断や病変の進展範囲，深達度診断に有用とされている。また，上部内視鏡に関連する領域としては咽頭・下咽頭や食道での有用性が数多く報告されている。本講演ではこれらの新しい観察法の原理，診断の実際について概説するとともに，特に頭頸部腫瘍と食道癌の重複癌についても言及したい。

### ○教育講演 1 5「口腔，下顎・上顎骨の画像診断」

#### 2. 疾患 木村 幸紀（昭和大学歯学部歯科放射線学教室）

口腔は狭い領域とはいえ様々な疾患が生じ画像診断の対象となり得る。特に悪性腫瘍が想定される場合には，良性腫瘍との鑑別，炎症性疾患との鑑別，あるいは悪性腫瘍であることが既知である場合には病期分類が要求される。また，単に軟部組織主体の疾患なのか骨に深く関わっていく疾患かで読影範囲も異なる。代表的なものとして，前者は舌癌であり，後者は歯肉癌である。また良性疾患では各種の腫瘍や嚢胞性疾患があり，炎症では歯原性の膿瘍などがある。顎骨に生じる疾患の画像診断では，一般的な骨疾患も生じることに加え歯原性疾患を頻繁に生じることが放射線科医の頭を悩ましていえると言えよう。また，上顎骨と下顎骨とではやや趣が異なり，前者においては増大した病変と上顎洞疾患との鑑別も要する。顎骨内病変の代表的なものは歯原性嚢胞や歯原性腫瘍であるが，非歯原性も多様な病変が生じる。これらに関して，可能な限り画像を供覧し所見の要点を解説する。

## 特別講演4

### NON-VASCULAR INTERVENTION IN THE URINARY TRACT.

Dr David Rickards, MRCS, LRCP. FRCR, FFRDSA.

Consultant Uroradiologist, The Insitiute of Urology and Nephrology,  
University College Hospitals, London.

This presentation represents my personal experience of intervention in the urinary tract over the past 30 years, ie from it's inception to the present day. I do not presume to be comprehensive for the type of intervention needed depends upon the clinical mix within the hospital.

Percutaneous nephrostomy.

This is a procedure that any interventionalist should be able to perform as it's occasionally needed in an emergency. Indications are predominately the relief of upper tract urinary obstruction and the diversion of urine in the unobstructed tract because of fistula, for example. Needle guidance is mandatory, usually with ultrasound, but CT, contrast iv and MR are alternatives in some cases. Drainage catheter size is 8F in nearly all cases. Long term nephrostomy is a poor option for the patient, but rarely has to be done, either with a ring nephrostomy or drainage catheters which need to be changed at regular intervals. In my unit, emergency nephrostomy associated with sepsis is rarely performed.

Percutaneous nephrolithotomy. PCNL

In the UK, this is performed by radiologists and urologists as a combined procedure. The radiologist is responsible for creating a tract through which the urologist extracts the stone. ESWL has taken care of most of the easy stones that require treatment. PCNL is performed in difficult stones and those unresponsive to ESWL. PCNL is also performed for encrusted stent removal and for upper tract transitional cell tumour. To aim to achieve

total stone clearance in many cases is not realistic. Multiple short procedures being preferable.

#### Percutaneous cystolithotomy.

In my unit, allot of reconstructive urological surgery is performed.

Neobladders, whatever they are constructed of are commonly complicated by bladder stones that cannot be treated by cystoscopy. These cases have their own problems of access and tract dilatation mainly because of the danger of damaging adjacent small or large bowel. Pre-operative imaging in these cases needs to be thorough.

#### Rendez-vous procedures.

Where ureters have been damaged, either during surgery or following trauma, reconstruction is the usual method of repair. In our unit, a combined antegrade and retrograde procedure is performed. This is only applicable where the defect in the ureter, whether complete or partial is short. Following percutaneous access to the collecting system, the radiologist catheterises the ureter down to the defect whilst the urologist ureterscopes the ureter retrogradely up to the defect. Using a combination of good luck and laser technology, guide wires from above are identified and the defect breeched. JJ stent insertion over an 8 week period usually allows the ureter to heal without stricture. This minimally invasive methods is greatly preferable to open repair of the ureter.

#### Stent insertion.

Antegrade stent insertion often requires considerable skill in getting down tortuous ureters and attenuated ones. Once the ureter is catheterised, stent insertion is usually easy. The use of permanent metal stents is becoming more popular as the material from which the stent is made improves to prevent urothelial overgrowth blocking it.

#### Percutaneous tumour ablation.

With the advent of laparoscopic and robotic therapy, percutaneous tumour ablation is but one option for small lesions. In my unit, ablation is only performed where surgery is not an option and that does not amount to

many cases a year. Thermal ablation is preferred, but HIFU (high intensity focussed US) is beginning to be introduced.

#### Percutaneous biopsy

Modern imaging provides accurate diagnosis in the vast majority of renal lesions rendering biopsy surplus to requirements. Where doubt exists, biopsy under either US or CT rarely present a problem. The most common organ of the urinary tract that needs biopsy is the prostate. For many years, transrectal guided biopsy has been performed for the diagnosis of prostate cancer. This technique is established, but not without its serious complications of bleeding and sepsis. It is perhaps incorrect to describe this procedure as a biopsy, it's more a sampling of the prostate. It is a fact that it is the only organ in the body which is sampled without accurate pre-biopsy imaging. Breast biopsy, for instance is targeted at a radiological abnormality. Refinements to prostate biopsy include template and now image-guided biopsy. The improvements of MR to image small cancers, the possibility of targeted treatment for prostate cancer with HIFU has already resulted in a sea change within my unit as to how to biopsy the prostate.

#### Genital tract intervention.

Recanalisation of fallopian tubes is well established. In male infertility secondary of obstruction of the ejaculatory ducts needs to be confirmed. Dilated seminal vesicles are not necessarily obstructed and vice versa. Perineal guided puncture of the seminal vesicles and antegrade seminal vesiculography will confirm or confound the diagnosis.

I hope this address to you will be taken in the spirit in which it will be delivered! That is a personal journey within the London Institute of Urology and Nephrology in the company of many of the world's leading urologists who have to a person embraced the rapid advance of interventional radiology, which to a certain extent reduced their own therapeutic mandate. To assuage their egos and their expertise, many of the interventions are performed as a combined procedure between urologist and radiologist. I firmly believe this is the way forward. Thank you for your attendance!