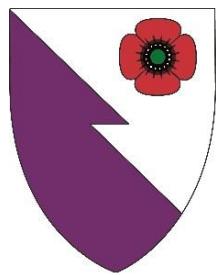


The Royal College of Emergency Medicine

Best Practice Guideline

Management of Suspected Internal Drug Trafficker (SIDT)



December 2020

Summary of recommendations

Clinical management

1. Toxicology screens (urinary/blood) should not be used to guide management or discharge decisions (*Level 5 evidence*).
2. A Low Dose CT Scan (LDCT) of the abdomen and pelvis is the investigation of choice in suspected internal drug traffickers (SIDT) (*Level 4 evidence*).
3. Those presenting with an acute abdomen should be offered a CT with contrast and referred for urgent surgical review (*Level 4 evidence*).
4. Indications for urgent surgical removal of packages include: abdominal pain (possible obstruction or ileus); radiological evidence of remaining package(s) which are too large to pass through the gastrointestinal tract and evidence of significant/worsening toxicity such as acute psychosis or adrenergic symptoms. (*Level 5 evidence*).
5. Body stuffers and pushers should be observed for 8 hours post ingestion if asymptomatic or longer if symptomatic (*Level 4 evidence*).
6. Asymptomatic body packers can be safely discharged to the police/Border Force (BF) (*Level 5 evidence*).
7. All patients transferred to police custody should receive a discharge letter, including Suspected Internal Drug Traffickers.

Legal and ethical issues

1. Current best practice is to perform a LDCT to look for internal packages. When consenting the patient, informing them that the findings might not change clinical management and may be used in a subsequent criminal prosecution is essential.
2. In patients aged under 18 years of age there are specific guidelines to follow regarding consenting for examination and imaging (Appendix 3).
3. EDs should implement their own local safeguarding systems in addition to any police safeguarding processes.
4. Medical information should be provided to the police in a sealed envelope for attention of the custody healthcare professional in line with Good Medical Practice and Caldecott Principles.

Forensic issues

1. Any packages or items obtained from the patient should be given as soon as possible to the police as part of their criminal investigation and to preserve the chain of evidence.

Scope

This guideline deals with patients presenting to the Emergency Department (ED) Suspected of Internal Drug Trafficking (SIDT). There are several means of drug concealment as described below. Increased awareness of SIDT risks amongst police has also increased the number of referrals to EDs. Persons under arrest are known as detainees. The document has been reviewed to encompass clinical, radiological, ethical and legal responsibilities for the management of SIDT for ED, and clarifies interactions with the Police and Border Force (BF) ¹.

Reason for development

There were 43 drug related deaths in police custody between 1997 and 2002 with 16 due to internal drug concealment ². These deaths in police custody are typically young patients and are preventable in nature. They have a significant impact on the families of the deceased as well as the police officers who are involved. These incidents automatically lead to a Coronial Inquest. There is often concern and apprehension amongst police officers when detaining a person suspected of internal drug trafficking due to the potential risk of death. Clinical staff may also be anxious when dealing with the police and detainees around consent, police powers, clinical investigations and the management of patients suspected of drug trafficking.

Definitions

Illicit drugs are imported into the UK by air, sea and land routes and then distributed throughout the country. Individuals may conceal drugs by swallowing drug packages or placing them in their anus or vagina. Patients are unlikely to admit to clinicians that they are concealing drugs. The following terminology from the Chief Medical Officer's Report on the Medical Care of SIDTs should be adopted by the NHS, Police Forces and BF agencies ³.

1. Body Packers or "Mules"

Body packers swallow well wrapped drug packages, most commonly cocaine. The packages are subsequently passed and sold on the street. Packages can number from a dozen to a few hundred and are of varying quality (30-80% purity) and size. Leakage, rupture or unravelling of the packages will expose packers to severe or fatal toxicity. In the past, packages were handmade using various materials, e.g. condoms, but they are now usually machine manufactured, reducing the risk of unravelling or rupturing ⁴. They are usually arrested at air, sea and land ports by Border Force officers and referred to local EDs.

2. Body Stuffers

Drug dealers and street users may conceal drugs wrapped in cling film in their mouth. The packages may be swallowed or spat out to avoid detection by the police. The packages are smaller in quantity (and dosage) than packers but are poorly protected in the digestive system and so more likely to lead to toxic symptoms. There is a delayed effect of release of the drugs which is why a period of observation in ED of 8 hours is required from the time of suspected ingestion.

It is police policy to take detainees who have been seen to swallow (stuff) drug packages directly to the ED and clinicians should be mindful that patients are likely to deny ‘stuffing’ and may not fully appreciate the potential hazards they have exposed themselves to. The police are specifically advised not to try and remove substances detainees have tried to swallow due to choking hazard.

Parachuting is a technique of recreational drug use in which medications or illicit drugs are ingested by wrapping them in a covering that is expected to dissolve or unravel in the gastrointestinal tract and release the drug for later absorption. These patients should be managed as body-stuffers.

3. Pushers

Pushers conceal drugs or objects such as mobile phones or sim cards, usually in containers such as “Kinder eggs”, in their rectum or vagina, to avoid detection. They are at a lower risk due to the packaging method, but pushers should be observed carefully as they may also swallow or re-insert to avoid detection⁵.

“County lines” describes tactics by drug dealers who use juveniles and vulnerable adult to transport drugs to suburban areas in this manner. Consider the possibility the patient trafficking drugs may themselves be a victim.

The Police Aspect

The Police and Criminal Evidence Act 1984 (PACE), as amended by the Drugs Act 2005⁶ and the Authorised Professional Practice (APP) from the College of Policing, recommend that an individual is transported straight to hospital as a medical emergency whenever an officer suspects a detainee has concealed drugs⁷.

The detainee will remain under arrest with officers maintaining a close watch to prevent re-swallowing or disposal of the evidence. However, a patient has the right to speak confidentially to a doctor and suitable arrangements, i.e. hospital security, should be available to enable this if the police are asked to leave.

The police would usually refer juveniles for safeguarding under local MASH or MAPPA procedures^{8,9}. The police may also consider charging the drug dealers with trafficking of children under the Modern Slavery Act 2015¹⁰. EDs should ensure that they complete a safeguarding referral in line with their local policies.

If an untoward incident occurs, e.g. a death, the police and/or the Independent Office of Police Conduct may seize relevant evidence for investigation¹¹. Full contemporaneous documentation should take place of any interaction with the police or BF.

Intimate Search

The police and BF have legislative powers in England and Wales (PACE section 55b), Northern Ireland and Scotland (section 14 of the Criminal Procedure Act 1995¹²) to authorise and request an intimate search if they have reasonable grounds for believing that the person has concealed class A drugs or anything to cause physical harm. An emergency physician cannot be compelled to undertake an intimate search whether the patient consents or not.

In the 25 years since the PACE legislative powers were enacted medical practice has evolved. Intimate searches are **NOT** recommended, even with the aid of a speculum or proctoscope as it may result in injury to the patient or examiner, risk breaking the packages, and may not reveal deeply located packages. Instead a LDCT with consent, should be performed to confirm the presence or absence of packages or foreign bodies, their location and number. Consideration for removal under best interest should be applied if the patient deteriorates (Appendix 3).

Radiology

Under PACE (section 55A) the police and BF have the authority to transfer detainees to a hospital for an x-ray and/or ultrasound as a criminal investigation tool to detect ingested drugs¹³. This requires consent from the detainee. However, clinicians are not required to request an x-ray or ultrasound when presented with the police authority even with consent from the patient (section 55A PACE). X-rays are no longer recommended irrespective of requests received from the Police or BF.

Multiple international studies over the last 10 years have shown the sensitivity and specificity of x-rays to be inferior (particularly for liquid containing packages) with CT now the gold standard investigation^{14,15,16}. A low dose protocol as seen in CT examinations of the kidneys, ureters and bladder (CT KUB), is recommended in this setting. LDCT techniques vary between different CT manufacturers and it is advisable to utilise local expertise to achieve low dose acquisitions whilst maintaining diagnostic quality for example the use of low KV parameters and iterative reconstruction techniques. It should be possible for a LDCT of the abdomen and pelvis to achieve a radiation dose of less than 3 mSv; this approximately equates to the average annual natural radiation exposure in the UK¹⁷.

Technological advances in UK security imaging have seen the introduction of backscatter body scanners in some ports, airports and prisons to assist in the detection of potential SIDTs. The positive and/or inconclusive body scanner imaging should be supplemented with formal LDCT.

In all cases, the ED clinician must assess for themselves the necessity for imaging and obtain consent from the detainee /patient. The patient has the right to refuse the investigation, see appendix 3 regarding consent, including juveniles.

Detainees/patients should be informed that a LDCT may not be therapeutic in nature and may be used as evidence in a criminal investigation. On the other hand, a

negative LDCT may expedite their release from police custody. Patients should be advised that if they do have internal drug packages there is a significant risk to their health should they burst or leak.

Pregnancy and SIDT

In a pregnant female suspected of internal drug trafficking, there may be concerns of the teratogenic and carcinogenic effects of ionizing radiation e.g. LDCT to the developing foetus. Ultrasound or MRI are not recommended alternative imaging modalities. Admission for observation may be necessary and the passage of drug free stools with the knowledge of the number of packages concealed may be used as an indicator for clearance.

If the patient is so unwell that they lack the ability to provide consent then the emergency physician should act in the patient's best interest with regards performing a scan, if it is safe to do so.

Imaging Interpretation

It is recommended that, where possible, LDCT examinations are reported by Radiologists with appropriate experience. A structured report should describe the location and estimated number of packages/objects and potential complications (obstruction, package rupture etc) whilst concluding a positive, negative or indeterminate result. This information should be added to the ED clinical discharge summary.

Certain adulterants, e.g. lignocaine, may cause similar appearance to faecal content material. To counter density variances in packages Radiologists are advised to read CT studies in both soft tissue and lung window settings and scrutinise densities uniform in shape or exhibiting a halo sign – features typical of improvised and manufactured packages trapped with air. LDCT should be reviewed using both standard abdominal soft tissue and lung window settings by an experienced Radiologist²⁰.

The accuracy of image interpretation and the quality of the diagnostic report are critical to the success of LDCT. In the event of the identification of unexpected findings on LDCT, results should be referred according to local standards for the communication of significant and unexpected findings¹⁸ to enable further clinical assessment as would be the case of any other patient.

The structured radiology report will permit the police or BF to confirm when all packages/objects have been passed/retrieved (Appendix 2). The report may be used as evidence to remand a detainee under s152 of the Criminal Justice Act 1998 (up to 192 hours) to retrieve the remaining drug packages¹⁹.

Clinical Management – General

Try to determine from Police or BF officers the nature/suspicion of the arrest, the suspected drug, quantity, when and how it was packed or stuffed. Perform basic observations (temperature, heart rate, respiratory rate, blood pressure, pupil size and GCS) on all patients with SIDT.

Look for toxicodromes (suggestive of package leakage/rupture), see Box 1. Consult TOXBASE for the most up-to-date guidance on the management of specific drug toxicity if abnormal findings noted²⁰. Risk factors for complications associated with concealed drugs, see Box 2²¹.

Box 1. Common Toxicodromes encountered in SIDT

Sympathomimetics e.g. Cocaine	Opiates e.g. Heroin
Tachycardia Hypertension Hyperpyrexia Dilated pupils Convulsions Agitation Chest pain Arrhythmias Nausea, vomiting Abdominal pain	Bradycardia Hypotension Hypothermia Miosis Respiratory compromise CNS depression Pulmonary oedema

In the event of cardiac arrest, cardiopulmonary resuscitation should be continued for at least an hour and only stopped after discussion with a senior clinician. Prolonged resuscitation, even for several hours, may be appropriate following poisoning as recovery with good neurological outcome may occur.

Any drugs/objects retrieved or passed should be given directly to Police or BF officers. The clinician should complete the MG11 transfer of packages statement, which is likely to reduce the need to attend court (Appendix 2).

Any drug screening by the Police or ED (Cozart test for cocaine and opiate) or toxicology should not be used to guide management or discharge decisions due to potential false negatives and positives. Some patients may be users and there may be leakage or none due to the packaging. Routine blood tests and toxicology screens are therefore not helpful.

Box 2. Risk factors for complications associated with concealed drugs

Abdominal pain
Vomiting
Abnormal vital signs
Poisoning
Improvised/home-made packaging
Large total quantity of drug (especially for body stuffers)
High number of packets (>50)
Large size of packets
Delayed passage of drug packets (>48 h)
Passage of fragments of packaging in stool
Poisoning in a co-transporter
Previous abdominal surgery (greater risk of obstructing secondary to adhesions)
Concomitant drug usage, especially constipating agents

Clinical Management – Body Stuffers / Parachuting (Appendix 1)

- Patients with any clinical signs or symptoms of toxicity should be kept for longer than 8hrs or until the signs and symptoms have resolved. Manage the patient according to TOXBASE guidelines for the suspected drug ingested.
- A LDCT may confirm or refute the presence of packages in the stomach or abdomen and allow earlier discharge from the ED if negative.
- Patients who have swallowed / stuffed packages may take several hours to develop symptoms depending on the type of wrapping and stomach content. Patients should be observed for at least 8 hours from the point of ingestion even if they refuse treatment / investigations ^{22 23 24}. See discharge advice below.

Clinical Management – Body Pushers (Appendix 1)

- Patients with any clinical signs or symptoms of toxicity should be kept for longer than 8hrs or until signs and symptoms have resolved. Manage the patient according to TOXBASE guidelines for the suspected drug ingested.
- No intimate search should be undertaken unless the patient is unwell, even then this must be balanced against the potential risk of accidentally damaging further packages and causing further toxicity. Manage the patient according to TOXBASE guidelines for the suspected drug ingested ²⁴.
- Consider a LDCT which can confirm the presence or absence, the location and number of packages/foreign bodies. If the patient does not consent to LDCT observe for at least 8hrs.

- If the patient consents to removal of the packages in hospital, the numbers removed should correspond with the estimated numbers seen on LDCT, if this has been performed.
- Patients with packages in the rectum or vagina, may be discharged to the police/BF if clinically well. Having the result of a LDCT scan which positively identifies packages allows the police to implement a constant watch whilst the patient is in custody. See discharge advice below.

Clinical Management – Body Packers (Appendix 1)

A LDCT should be considered as the first line imaging investigation of choice in the asymptomatic patient.

Body Packers – symptomatic and positive imaging

- If the patient is symptomatic for cocaine toxicity, refer urgently to the surgical team for surgical removal ²⁵. Use appropriate doses of benzodiazepines and nitrates for hypertension due to severe cocaine toxicity and sodium bicarbonate for QRS prolongation (TOXBASE). Anaesthetic support is often required for early sedation to manage the hyper-adrenergic symptoms. Endoscopic removal risks damaging packages and further leakage. A CT examination of the abdomen and pelvis with intravenous contrast may aid surgical intervention but should not delay surgery in an unwell patient.
- If a patient is symptomatic with opiate toxicity, then use generous amounts of naloxone and consider a naloxone infusion, this may reduce the need for surgery (TOXBASE). CT with contrast prior to surgery is helpful but only if the patient can be safely maintained on naloxone. The patient should be monitored closely as there is a high risk of death.

Body Packers asymptomatic and positive imaging

- Asymptomatic body packers can be managed conservatively, with surgery only being indicated on clinical grounds or when packages become immobile ^{1 26 27 28}. Patients/detainees can be observed and managed at police or BF custodies. See discharge advice below.

Body Packers – mild symptoms and positive imaging

- Those with confirmed imaging and mild symptoms, e.g. abdominal pain, can be treated conservatively with close monitoring in hospital.
- Laxatives or whole bowel irrigation can be used under medical supervision to encourage movement of packages. Isotonic preparations such as Klean-Prep or Movicol (macrogols) are recommended as there is a theoretical risk of rupture with hypertonic solutions such as Fleet, Picolax or lactulose. Picolax is also reported to damage rubber condoms.

Body Packers – Asymptomatic and refusal of imaging

- Those patients who refuse to consent to LDCT and who are asymptomatic may be discharged to the care of the Police / BF. See discharge advice below.

Body Packers – Confirmation of complete clearance of packages

- The police/BF may request confirmation that the patient does not have any packages remaining internally. There is no evidence to base the complete clearance of drug packages on the number of clear stools passed. Packages may become impacted in rugal folds, or at the ileocaecal valve. In general, if packages have not been passed within 48 hours they are unlikely to be passed through normal bowel motions.
- If an initial LDCT has been performed with an estimate of packages this may be correlated with the number of packages passed. In some circumstances, e.g. where no initial LDCT has been performed or it is unclear as to number of packages packed an exit LDCT may assist in confirming that there are no residual or retained packages .

Discharge Advice

- GMC guidance and Caldicott Principles advocate information sharing to ensure the safe handover of patients between health providers and those taking over care of patients including the police/BF. On discharge of patients, a confidential medical summary detailing all relevant investigations and treatment should be provided in a sealed envelope marked for the attention of the custody healthcare professional. The patient should be informed of the medical handover.
- All patients with capacity have a right to refuse investigations and discharge themselves from the hospital even though they are under arrest. Document fully what the patient has been told about their risks.
- A discharge summary detailing type, numbers of packages or items removed or remaining will assist the custody healthcare professional in managing the detainee safely.
- Provide the Police or BF with advice on the clinical signs of toxicity when discharging asymptomatic patients who still have retained packages, to the care of the Police or BF. Record who you have given this advice to.

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Endorsements

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Review

Usually within three years or sooner if important information becomes available.

Conflicts of Interest

Dr Meng Aw-Yong is the Medical Director of the Metropolitan Police Service and Non-Executive Medical Director Health Practice Associates Council

Disclaimers

The College recognises that patients, their situations, Emergency Departments and staff all vary. This guideline cannot cover all possible scenarios. The ultimate responsibility for the interpretation and application of this guideline, the use of current information and a patient's overall care and wellbeing resides with the treating clinician.

Research Recommendations

More research is required on the validity of backscatter body scanners used by BF and the safe observation period for body packers.

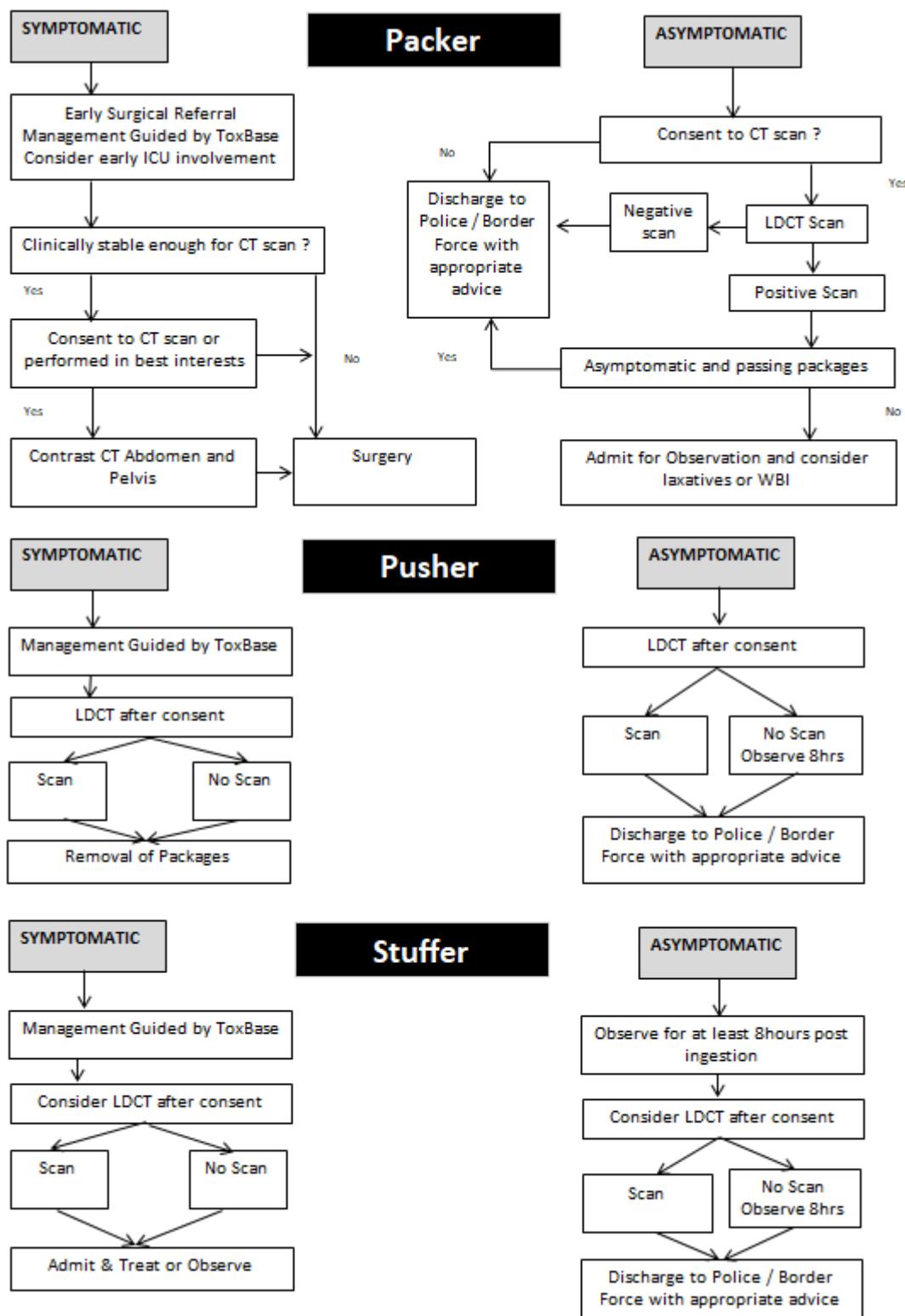
Audit standards

None.

Key words for search

Body packers, body pushers, body stuffers, low dose CT, drug concealment, heroin, cocaine.

Appendix 1: Algorithm for suspected internal drug traffickers (SIDT)



Appendix 2: Statement template for handover of retrieved packages

Witness Statement

Form MG11

(CJ Act 1967, s.9 MC Act 1980, s.5A (3) (a) and 5(B); MC Rules 1981, r.70)

Statement of Dr XXX

Age: over 21 years old

Occupation: YYY

This statement (consisting of ZZZ pages each signed by me) is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence, I shall be liable to prosecution if I have wilfully stated in it anything, which I know to be false or do not believe to be true.

Dated the xxx

Signature

I am currently working as a doctor in XYZ hospital etc

1. This statement confirms that I was the surgeon operating on Mr/Mrs/Miss ABC on the x day, month X year. I have retrieved xxx number of packages from Mr/Mrs/Miss ABC and have passed the packages to the Police/Border Forces officer at xx time, xx date.

Signature

Signature witnessed by.....

Page No. 1

Appendix 3: Consenting a person suspected of drug trafficking for LDCT

Patient is symptomatic (hence a therapeutic examination)

Patient Age	Needs Patient consent (if has capacity)	Needs parent or guardian	Treat or investigate if lacks capacity?
≥ 18 years old	Yes	No	Yes in best Interest
16 or 17 years old	Yes	Yes if possible but not to delay if life at risk	Yes in best Interest
<16 years old	Yes	Yes if possible but not to delay if life at risk	Yes in best Interest

Patient is asymptomatic (hence a forensic examination)

Patient Age	Needs patient consent (if has capacity)	Needs parent or guardian
≥18 years old	Yes	No
16 or 17 years old	Yes	Yes
<16 years old	Yes	Yes

If the LDCT is therapeutic in nature i.e. abdominal pain, suspected burst package etc. then a Gillick competent child can consent to a LDCT or treatment without parental consent. It would be good practice to inform the person with parental responsibility and advise the child accordingly.

A juvenile is classified by the police as anyone under the age of 18. Where a person under 18 years, who is judged to have capacity, refuses treatment, such a refusal can be over-ruled either by a person with parental responsibility for the child or by the court. This must be on the basis of the best interests of the person ²⁷.

Where the consent of a parent or guardian is required for these procedures, it is not necessary for the parent or guardian to be at the police station or hospital to give that consent. However, where the consent of the juvenile only (Gillick competent) is required it must be obtained in the presence of an appropriate adult, who may be the parent or guardian or some other suitable person over the age of 18 years ²⁸.

Where a LDCT is not therapeutic i.e. forensic in nature for determining presence of drug packages then consent from a person with parental responsibility is required for anyone under 18 years of age. This is because the findings of the LDCT may be used as evidence in court proceedings.

Methodology

Where possible, appropriate evidence has been sought and appraised using standard appraisal methods. High quality evidence is not always available to inform recommendations. Best Practice Guidelines rely heavily on the consensus of senior emergency physicians and invited experts.

Evidence Levels

1. Evidence from at least one systematic review of multiple well-designed randomised control trials
2. Evidence from at least one published properly designed randomised control trials of appropriate size and setting
3. Evidence from well-designed trials without randomisation, single group pre/post, cohort, time series or matched case control studies
4. Evidence from well-designed, non-experimental studies from more than one centre or research group
5. Opinions, respected authority, clinical evidence, descriptive studies or consensus reports.

References

- ¹ BMA Ethics (2009) Health care of detainees in police stations. London: BMA
- ² Havis S, Best D, Carter J. Concealment of drugs by police detainees: lessons learned from adverse incidents and from 'routine' clinical practice. *J Clin Forensic Med* 2005;12(5):237-41
- ³ Chief Medical Officer's Expert Group (2013) The Medical Care of Suspected Internal Drug Traffickers – Independent Report.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/216999/SIDT-Report-FINAL.pdf [Accessed 18 May 2020]
- ⁴ Traub SJ, Hoffman RS, Nelson LS. Body Packing - The Internal Concealment of Illicit Drugs. *N Engl J Med* 2003;349(26):2519-26
- ⁵ Schaper A, Hofmann R, Bargain P, Desel H, Ebbecke M, Langer C. Surgical treatment in cocaine body packers and body pushers. *Int J Colorectal Dis* 2007;22(12):1531-5
- ⁶ Drugs Act 2005. <http://www.legislation.gov.uk/ukpga/2005/17/contents>. [Accessed 18 May 2020]
- ⁷ College of Policing (2013) Authorised Professional Practice: Swallowed or packed drugs packages. <https://www.app.college.police.uk/app-content/detention-and-custody-2/detainee-care/alcohol-and-drugs/#swallowed-or-packed-drugs-packages> [Accessed 18 May 2020]
- ⁸ Working together to safeguard children: Multi-Agency Safeguarding Hub. <https://www.gov.uk/government/news/working-together-to-safeguard-children-multi-agency-safeguarding-hubs>. [Accessed 18 May 2020]
- ⁹ MAPPA guidance: Ministry of Justice.
<https://www.justice.gov.uk/downloads/offenders/mappa/mappa-guidance-2012-part1.pdf>. [Accessed 18 May 2020]
- ¹⁰ Modern Slavery Act.
<http://www.legislation.gov.uk/ukpga/2015/30/contents/enacted>. [Accessed 18 May 2020]
- ¹¹ Independent Office for Police Conduct.
<https://www.policeconduct.gov.uk/investigations/our-investigations>. [Accessed 18 May 2020]

¹² Criminal procedure (Scotland) Act 1995.

<http://www.legislation.gov.uk/ukpga/1995/46/section/14/enacted>

¹³ Section 152, Criminal Justice Act 1988, amended by Section 8 of the Misuse of Drugs Act 2005. <https://www.legislation.gov.uk/ukpga/1988/33/section/152>. [Accessed 18 May 2020]

¹⁴ Aissa J, Rubbert C, Boos J, Schleich C, Thomas C, Kröpil P, Antoch G, Miese F. Low-tube voltage 100 kVp MDCT in screening of cocaine body packing: image quality and radiation dose compared to 120 kVp MDCT. *Abdominal Imaging* 2015; 40(7):2152-2158

¹⁵ Pinto A, Reginelli A, Pinto F, Sica G, Scaglione M, Berger F, Romano L, Brunese L. Radiological and practical aspects of body packing. *Br J Radiol* 2014; Apr;87(1036)

¹⁶ Flach P, Ross S, Ampanozi G, Ebert L, Germerott T, Hatch G, Thali M, Patak M. "Drug mules" as a radiological challenge: sensitivity and specificity in identifying internal cocaine in body packers, body pushers and body stuffers by computed tomography, plain radiography and Lodox. *Eur J Radiol* 2011; 81(10):2518-2526

¹⁷ Ionising radiation: dose comparisons.

<https://www.gov.uk/government/publications/ionising-radiation-dose-comparisons> [Accessed 12 November 2018]

¹⁸ The Royal College of Radiologists. (2016) Standards for the communication of radiological reports and fail-safe alert notifications.

https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr164_failsafe.pdf [Accessed 18 May 2020]

¹⁹ Crown Prosecution Service (2009) Drugs - Evidential Drug Identification Testing in Police Stations. <https://www.cps.gov.uk/legal-guidance/drugs-evidential-drug-identification-testing-police-stations> [Accessed 18 May 2020]

²⁰ TOXBASE: <http://www.toxbase.org> [Accessed 18 May 2020]

²¹ Beckley I, Ansari N, Khwaja HA, Mohsen Y. Clinical management of cocaine body packers: the Hillingdon experience. *Can J Surg* 2009;52(5):417-421

²² Norfolk GA. The fatal case of a cocaine body-stuffer and a literature review – towards evidence-based management. *J Forensic Leg Med* 2007;14(1):49-52

²³ Sporer M, Firestone J. Clinical Course of Crack Cocaine Body Stuffers. *Ann Emerg Med* 1997; 29(5):596-60

²⁴ Moreira M, Buchanan J, Heard K. Validation of a 6-hour observation period for cocaine body stuffers. *Am J Emerg Med* 2011;29(3):299-303

²⁵ Booker RJ, Smith JE, Rodger MP. Packers, pushers and stuffers—managing patients with concealed drugs in UK emergency departments: a clinical and medicolegal review. *Emerg Med J* 2009;26(5):316–320

²⁶ Beckley I, Ansari N, Khwaja HA, Mohsen Y. Clinical management of cocaine body packers: the Hillingdon experience. *Can J Surg* 2009;52(5):417-421

²⁷ De Bakker JK, et al. Body packers: a plea for conservative treatment. *Langenbecks Arch Surg* 2012;397(1):125–130

²⁸ Bulstrode N, Banks F, Shrotriya S. The outcome of drug smuggling by “body packers”— the British experience. *Ann R Coll Surg Engl* 2002;84(1):35–8