

## ASSESSMENT AND DETECTION

### PAT (2009)—Revisions to the Paddington Alcohol Test for Early Identification of Alcohol Misuse and Brief Advice to Reduce Emergency Department Re-attendance

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(Received 11 February 2009; accepted 3 March 2009; advance access publication 27 March 2009)

**Abstract** — The Paddington Alcohol Test (PAT) has evolved over 15 years as a clinical tool to facilitate emergency physicians and nurses giving brief advice and the offer of an appointment for brief intervention by an alcohol nurse specialist. Previous work has shown that unscheduled emergency department re-attendance is reduced by 'making the connection' between alcohol misuse and resultant problems necessitating emergency care. The revised 'PAT (2009)' now includes education on clinical signs of alcohol misuse and advice on when to request a blood alcohol concentration.

The Paddington Alcohol Test (PAT) has developed pragmatically for emergency department (ED) staff to give patients brief advice (BA) about alcohol since first published in 1996 (Smith *et al.*, 1996). PAT is applied selectively for the 10 presenting conditions with the highest prevalence of alcohol misuse as a contributory factor (Fig. 1) (Huntley *et al.*, 2001). BA includes the offer of an appointment with an alcohol nurse specialist (ANS) for an individualized, motivational enhancement-based session: brief intervention (BI). For every two patients accepting such an appointment, there is one less re-attendance over the next year (Crawford *et al.*, 2004), justifying the time spent on initial BA. PAT (2009) (Fig. 2) distinguishes between BA delivered by any ED doctor or nurse taking 2 min or less, as opposed to specialized BI of >20 min delivered by ANSs.

The term 'screening' is replaced in PAT (2009) (Figs. 1 and 2) by 'early identification', to encourage patients' insight before permanent alcohol-related harm has developed. The requirement to process 98% of ED patients within 4 h (Department of Health, 2001) creates its own stresses, but improved patient throughput generates increased gratitude from patients with an improved working atmosphere for staff. This helps counter 'clinical inertia'—failure to initiate or intensify treatment when indicated.

ED staff are instructed to deal first with the patient's reason for attending—before introducing the subject of alcohol. The patient, responding to this initial care, is more likely to contemplate change when PAT is applied. The word routinely is included in the first question: 'We routinely ask all patients who have (presenting condition), do you drink alcohol?' This approach is non-judgemental, as are the second (quantity) and third (frequency) questions. The key fourth question is: 'Do you feel your attendance at A&E is related to alcohol?' This helps 'make the connection' facilitating the patient to contemplate change (Rollnick *et al.*, 2005).

PAT (2009) (Fig. 2) summarizes clinical signs of alcohol use (acronym 'SAFE Moves ABCD'), although these may be masked by tolerance (Cherpitel *et al.*, 2005). Alcohol misuse itself and Wernicke's encephalopathy may both demonstrate similar clinical signs (Fig. 2). Therefore, Wernicke's can only be diagnosed when the blood alcohol concentration (BAC) is

low (Thomson *et al.*, 2002). PAT (2009) highlights use of intravenous B vitamins (Pabrinex), especially when nutrition is poor (Joint Formulary Committee, 2007).

PAT (2009) delineates requesting of BACs where results can assist management and, when raised, prompt subsequent PAT application (Touquet *et al.*, 2008). Clinical Institute Withdrawal Assessment (CIWA) guidelines are recommended for the recognition and prevention of alcohol withdrawal (Taylor, 2006).

Feedback to patients about their drinking increases BI appointment-uptake by 20%. PAT (2003) showed 97% sensitivity and 88% specificity by comparison to the 'gold standard' AUDIT questionnaire (Patton *et al.*, 2004). Attendance for BI exceeds 50% if appointment is within 48 h of ED attendance (Brown, 2006). Dependent drinkers may need referral for further support in the community, which the ANS provides rather than ED physicians.

Alcohol education, by consultants, senior nurses and ANSs, is facilitated by PAT (2009). While it may take time to gain staff confidence that implementing PAT is worthwhile, it is welcome once reduction in alcohol-related re-attendance is realized. Each acute hospital should now have a named Consultant as 'Alcohol Lead'.

## REFERENCES

- Brown A. (2006) Alcohol health work, an opportunist A&E intervention. *Clin Eff Nurs* **9**:e253–9.
- Cherpitel C, Bond J, Ye Y *et al.* (2005) Clinical assessment compared with breathalyser readings in the emergency room: concordance of ICD-10 Y90 and Y91 codes. *Emerg Med J* **22**:689–95.
- Crawford MJ, Patton R, Touquet R *et al.* (2004) Screening and referral for brief intervention of alcohol misusing patients in an emergency department: a pragmatic randomised controlled trial. *Lancet* **364**:1334–9.
- Department of Health. (2001) *Reforming Emergency Care*. London: HMSO. Available at [www.doh.gov.uk/emergencycare](http://www.doh.gov.uk/emergencycare) (1 March 2009, date last accessed).
- Huntley JS, Blain C, Hood S *et al.* (2001) Improving detection of alcohol misuse in patients presenting to an A&E department. *Emerg Med J* **18**:99–104.

# PADDINGTON ALCOHOL TEST 2009

## 'make the connection'

|   |
|---|
| PATIENT IDENTIFICATION STICKER:<br>NAME<br>D.O.B. |
|---|

- A. *PAT* for **TOP 10** presentations – circle as necessary. B. **Clinical Signs** of alcohol use C. **BAC** (PTO)
- |  |                          |                       |                            |
|--|--------------------------|-----------------------|----------------------------|
| 1. FALL (incl. trip)                         | 2. COLLAPSE (incl. fits) | 3. HEAD INJURY        | 4. ASSAULT                 |
| 5. ACCIDENT                                  | 6. UNWELL                | 7. GASTRO- INTESTINAL | 8. CARDIAC (i. Chest pain) |
| 9. PSYCHIATRIC (incl. DSH & OD) please state | 10. REPEAT ATTENDER      | Other (please state)  |                            |

**EARLY IDENTIFICATION TO REDUCE RE-ATTENDANCE**  
 Only proceed after dealing with patient's 'agenda,' i.e. patient's reason for attendance.  
 "We routinely ask all patients having ... (above presentation) ... **do you drink alcohol?**"

|                                |                         |
|--------------------------------|-------------------------|
| <b>1 Do you drink alcohol?</b> | YES (go to #2) NO (end) |
|--------------------------------|-------------------------|

|  |                    |
|--|--------------------|
| <b>2 What is the most you will drink in any one day?</b> | (UK alcohol units) |
|--|--------------------|

Use the following guide to **estimate** total daily units.  
 (Standard pub units in brackets; home measures often three times the amount!)

|   |               |                      |                    |                      |                     |                      |
|---|---------------|----------------------|--------------------|----------------------|---------------------|----------------------|
| <b>Beer /lager/cider</b>                      | Pints (2)     | <input type="text"/> | Cans (1.5)         | <input type="text"/> | Litre bottles (4.5) | <input type="text"/> |
| <b>Strong beer /lager /cider</b>              | Pints (5)     | <input type="text"/> | Cans (4)           | <input type="text"/> | Litre bottles (10)  | <input type="text"/> |
| <b>Wine</b>                                   | Glasses (1.5) | <input type="text"/> | 750ml bottles (9)  | <input type="text"/> | <b>Alcopops</b>     |                      |
| <b>Fortified Wine</b> (Sherry, Port, Martini) | Glasses (1)   | <input type="text"/> | 750ml bottles (12) | <input type="text"/> | 330ml bottles (1.5) | <input type="text"/> |
| <b>Spirits</b> (Gin, Vodka, Whisky etc)       | Singles (1)   | <input type="text"/> | 750ml bottles (30) | <input type="text"/> |                     |                      |

If more than twice daily limits (8 units/day for men, 6 units/day for women) **PAT +ve** (continue to Q3 for all)

|                                   |
|-----------------------------------|
| <b>3 How often do you drink ?</b> |
|-----------------------------------|

Every day \_\_\_\_\_ times per week  
 Less than weekly

May be dependent. Consider thiamine (? Nutrition) & chlordiazepoxide (? CIWA).  
 Advise against daily drinking.

(continue to next question)

|  |                    |
|--|--------------------|
| <b>4 Do you feel your attendance at A&amp;E is related to alcohol?</b> | YES (PAT+ve)<br>NO |
|--|--------------------|

If **PAT +ve** give feedback e.g. "Can we advise that your drinking is harming your health".  
 "It is recommended that you do not regularly drink more than 4 units/day for men or 3 units/day for women".

|   |           |
|---|-----------|
| <b>5 We would like to offer you further advice. Would you be willing to see our alcohol nurse specialist (ANS)?</b> | YES<br>NO |
|---|-----------|

If "YES" to Q5 give ANS appointment card and leaflet and make appointment in diary @ 9am to 10am.  
 Other appointment times available, please speak to ANS or ask patient to contact (phone number on app. card).  
 Give alcohol advice leaflet ("Units and You") to all PAT+ve patients, especially if they decline ANS appointment.

Please note here if patient admitted to ward .....

Referrer's Signature \_\_\_\_\_ Name Stamp \_\_\_\_\_ Date: PTO

**THANK YOU**

|              |
|--------------|
| ANS OUTCOME: |
|--------------|

Fig. 1. PAT(2009) front: 'make the connection'.

Joint Formulary Committee. (2007) *British National Formulary (BNF, bnf.org)*, 54th edn.: 515.  
 Patton R, Hilton C, Crawford MJ *et al.* (2004) The Paddington Alcohol Test: a short report. *Alcohol Alcohol* **39**:266–8.  
 Rollnick S, Butler CC, McCambridge J *et al.* (2005) Consultations about changing behaviour. *BMJ* **331**:961–3.  
 Smith SGT, Touquet R, Wright S *et al.* (1996) Detection of alcohol misusing patients in accident and emergency departments: the Paddington alcohol test (PAT). *J Accid Emerg Med* **13**:308–12.

Taylor B. (2006) Implementation and clinical audit of alcohol detoxification guidelines. *B J Nurs* **15**:30–7.  
 Thomson AL, Cook CCH, Touquet R *et al.* (2002) The Royal College of Physicians Report on Alcohol: guidelines for managing Wernicke's Encephalopathy in the A&E department. *Alcohol Alcohol* **37**:513–21.  
 Touquet R, Csipke E, Holloway P *et al.* (2008) Resuscitation room blood alcohol concentrations: one-year cohort study. *Emerg Med J* **25**:752–6.

**A. History****B. Clinical Signs****C. Blood Alcohol Concentration****A. History**

PAT(2009) is a clinical and therapeutic tool to 'make the connection' between ED attendance and drinking. PAT(2009) was specifically developed to make best use of the "OPPORTUNISTIC TEACHABLE MOMENT." Any ED doctor or nurse can follow PAT to give **Brief Advice (BA)** taking less than two minutes for most patients. **BA** is followed by the offer of a **Brief Intervention (BI)** from the Alcohol Nurse Specialist (ANS). **BI** is a specialist session lasting more than 20 minutes.

**This reduces the likelihood of re-attendance at the ED**

|                            |   |
|----------------------------|---|
| <b>PAT</b>                 | <b>Gain the patient's confidence:</b> Deal with the patient's reason for attending <b>first</b> , so they are in a receptive frame of mind for receiving Brief Advice.<br><br>Then apply PAT for <b>THE TOP 10' presentations</b> or when signs of alcohol use. PAT takes less than a minute for most patients who drink. |
| <b>ROUTINE</b>             | <b>Q1</b> 'We <b>routinely</b> ask all patients having (this presentation) if they drink alcohol - do you drink?'<br><br><b>If No:</b> PAT-ve, discontinue (providing clinician agrees with the answer).  |
| <b>QUANTITY</b>            | <b>Q2:</b> "What is the most you will drink in any one day?"<br><b>1 Unit (UK) = 10ml alcohol = 8gms alcohol</b><br><b>Units = % ABV x volume</b> (in litres)<br>% ABV is '% of alcohol by volume' as indicated on bottle or can.   |
| <b>FREQUENCY</b>           | <b>Q3:</b> "How often do you drink?" Daily drinking may indicate dependence. Any heavy drinking risks adverse consequences and A&E re-attendance.<br><br>NB Hazardous drinkers should be given leaflet "Units & You".   |
| <b>MAKE THE CONNECTION</b> | Everyone who says yes to Q1 should be asked <b>Q4:</b><br>"Do you feel your current attendance at A&E is related to alcohol?"<br>If yes, then you have successfully started <b>Brief Advice (BA)</b> by the patient associating their drinking with resulting hospital attendance.  |

**B. Clinical Signs of acute alcohol use: 'SAFE Moves: ABCD'**

|                     |  |
|---------------------|--|
| <b>S'mell</b>       | of alcohol.  |
| <b>S'peech:</b>     | varying volume & pace; slurring & jumbled.   |
| <b>A'ffect:</b>     | variable judgement & inappropriate behaviour; euphoria/depression; decreased co-operation; emotional.                                      |
| <b>'Face:</b>       | sweating/flushed ( <i>cushingoid – chronic</i> ), ? injury.  |
| <b>'Eyes:</b>       | red conjunctiva, nystagmus*, ophthalmoplegia*  |
| <b>'Moves':</b>     | fine motor control*, incoordination (acute cerebellar syndrome)*.<br>gross motor control (walking)*, ( <i>truncal ataxia – chronic</i> )*. |
| <b>Airway:</b>      | snoring with obstruction. Inhalation of vomit - ? Mallory-Weiss  |
| <b>Breathing:</b>   | slow/shallow, hypoxia with CO <sub>2</sub> retention - ? air entry   |
| <b>Circulation:</b> | tachycardia, irregularity. Hypotension; vasodilatation with heat loss.<br>Collapse. Urinary retention or incontinence; but ? dehydration.  |
| <b>Disability:</b>  | variable alertness*, confusion*, hallucinations*, sleepiness. ? GCS.   |

\* **Signs of possible Wernicke's - give thiamine i.v. (UK: Pabrinex-BNF 54 onwards).**

*For monitoring withdrawal use 'CIWA' (Clinical Institute Withdrawal Assessment) – see: Hospital guidelines for managing alcohol withdrawal.*

**C. Resuscitation Room:** request Blood Alcohol Concentration (**BAC**), or if PAT not possible.

1. Collapse
2. Self-harm (overdose, suicidal)
3. Trauma
4. Gastro-intestinal bleeding
5. Non-cardiac chest pain

**For further information about the Paddington Alcohol Test (PAT), 'SAFE Moves' or BAC contact:**

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Fig. 2. PAT(2009) reverse side: 'History, Clinical signs, Blood Alcohol concentration (BAC)'.