INTRODUCTION
Anaesthetists are over-represented in rehabilitation centres for substance abuse/misuse. Most anaesthetists misuse drugs intravenously, often opiates; some use propofol, midazolam or other anaesthetic drugs. Others misuse alcohol.

Many anaesthetic departments have experienced the trauma of discovering that a member of their team is addicted to opiates or other drugs.

Sadly the first indication of substance misuse in an anaesthetist may be manifest by his or her death, from either deliberate or accidental overdose.

Suicide in anaesthetists is frequently associated with substance abuse (and also mental illness). Suicide is the cause of death in approximately 6-10% of anaesthetists.

Drug and/or alcohol misuse may occur for several reasons:
those doctors with underlying psychiatric disorders
those who take drugs to counter mental or physical pain
those whose personalities include the enjoyment of risk-taking.

It is essential that substance misuse is recognized and death prevented.

It is important to identify such individuals as soon as possible so that intervention can occur, and the affected doctor can be treated and rehabilitated. A timely and judicious resolution will promote both the health of the anaesthetist, and avoid potential harm to his or her patients.

Due to an increasing awareness of the problem, individuals are now more frequently identified, and successfully submitted for therapy.

Some may then commence a return to work program, perhaps in an anaesthetic department or group. Trainees and younger anaesthetists recovering from substance misuse may benefit from a career change.
ANAESTHETIC DRUG ABUSE

The following recommendations are made:

RAISING AWARENESS AND BEING PREPARED

- There should be a proactive program in departments and group practices. This should include educational activities to raise awareness of the dangers of substance misuse, as well as its recognition.
- A substance misuse interest group of 2–3 people, ideally including an addiction therapist and/or psychiatrist, should be considered. Larger groups may wish to set up a Substance Misuse Committee (see appendix).
- Borrow or develop guidelines for the detection and treatment of substance misuse problems amongst colleagues and staff (perhaps based on this Resource Document).
- Local treatment resources should be identified, including community drug rehabilitation, Doctors’ Health Advisory Service (DHAS), Alcoholics Anonymous, and the Medical Board or Council’s Impaired Registrants’ Programs.
- Dealing with an anaesthetic team member misusing substances is primarily a health and ethical issue; it should involve therapeutic strategies, rather than employment, disciplinary, or criminal processes.

SUSPICION AND RECOGNITION OF DRUG ABUSE

Direct evidence of substance abuse

Finding an intravenous needle or cannula in situ in a doctor, or observing his/her use of injectable or inhalational agents.

This is a critical situation requiring immediate action.

Depending on the condition of the doctor, the following actions should be taken
  - Call for the medical emergency team if necessary
  - Do not leave the doctor alone
  - The doctor must be immediately relieved of any clinical duties
  - Notify the head of department
  - Notify the duty psychiatrist – who should arrange immediate escorted admission to an in-patient detoxification centre
  - If the doctor agrees to stop work, and be admitted to an in-patient facility, then notification to the regulatory authority (AHPRA, MCNZ) should be made when convenient – perhaps the next day.
  - If the doctor does not agree to stop work immediately, then an immediate notification to the regulatory authority must be made
Major signs of drug abuse

One or more of the following signs of drug abuse may be considered sufficient to justify a report of suspected drug abuse, and require reporting, gathering of evidence and a planned intervention:

Should such signs be observed in a staff member, it is mandatory to make an immediate report to a senior colleague, a member of a Substance Abuse Committee, or a mentor.

- Observation of injection marks on the body.
- Observation of pills, syringes, ampoules, bloody swabs, tissues, or intravenous equipment, or other evidence of drugs in any non-workspace environment, eg at home, in an office, or in the change room.
- Direct observation of diversion, self-administration, misuse of anaesthetic drugs, or falsification of records.
- Signing out increasing quantities of (usually opiate) drugs, or quantities of drug which are inappropriately high for the use specified.
- Inconsistencies in recording drug use for patients, or unaccountably missing drugs.
- Increasingly illegible, inaccurate, altered, or otherwise inadequate or unusual record-keeping.
- A consistent pattern of complaints regarding excessive pain, by recovery or ward staff, in patients of a particular anaesthetist. The patients’ pain is out of proportion to the recorded amounts of analgesic drugs given.
- Reports of a major change in attitudes or behaviours.
- Observation of tremors or other withdrawal symptoms.
- Observation of intoxicated or bizarre behaviour.

NB Further clarification of major signs may be obtained by reference to DSM IV (Diagnostic and Statistical Manual of the American Psychiatric Association) Criteria for Psychoactive Substance Dependence and Diagnostic Criteria for Opioid Withdrawal.

Circumstantial evidence

The following signs may be considered sufficient to arouse suspicion of possible drug misuse, or even to justify a report of drug misuse, if observed in a developing pattern:

At work:
- Wearing long-sleeved gowns in theatre or warmer clothes than necessary
  - to conceal arms eg needle marks, in-dwelling cannula
  - and/or to keep warm - sensitivity to temperature.
- Spots of blood on clothing. Note - leg or foot veins are frequently used.
- Increased sick leave, and/or absenteeism
- Unavailability, irregular hours, decrease in reliability, poor punctuality.
- Working alone, refusing breaks, willing to relieve others in theatre.
- Volunteering for more cases, or more on call.
- Leaving patients unattended in theatre.
- Being found in unusual places in the theatre complex when expected to be in theatre.
- Carrying syringes or ampoules in clothing.
- Being in the hospital out of hours when not on duty or call.
- Personally administering medication normally others' responsibility
- Increasing time in the toilet or bathroom.
- Intoxicated behaviour, pin point pupils, weight loss, pale skin
- Increase in accidents or mistakes
- Unsatisfactory work records
- Frequent moving or changing jobs.
- Unexplained absences while at work or on duty.
- Elaborate rationalisations of bizarre or irrational conduct.

At home (or at work).
- Significant changes in behaviour, presentation, personality or emotions.
- Wide mood swings, periods of depression, euphoria, caginess or irritability.
- Social withdrawal, increased isolation or elusiveness.
- Deterioration of personal relationships, development of domestic turmoil, decrease in sexual drive.
- Overspending.
- Elaborate rationalisations of bizarre or irrational conduct.
- Obtaining an unusual medical diagnosis for bizarre conduct or symptoms (which are in fact arising from drug usage).
- Deterioration in personal hygiene.
- Numerous health complaints, impulsive behaviour.
- Health concerns expressed by partner or family.
- Other inappropriate conduct.
COLLECTION OF EVIDENCE
A report concerning an anaesthetist as possibly misusing illicit substances raises the following concerns:

- The possibility of the reports being true - an abuser in the department or group can lead to a very challenging situation.
- There can be difficulty in maintaining the necessary confidentiality.
- Patients are potentially put at risk.
- The anaesthetist is significantly at risk (health-wise, or if the reports are unsubstantiated, his or her reputation).

Following the presentation of oral or written evidence, or suspicion of abuse, the person reporting must be assured that his/her observations will be taken seriously and confidentially.

Discretion should be required from the reporter pending investigation of the allegation.

**Preparation and Response**
In conjunction with the employer where practicable, written evidence of observed or suspected substance misuse should be collated by a senior member of the department or group, and any oral evidence should be documented.

If possible, talk to a colleague who has had previous experience of a team member misusing substances in his or her group or department.

These reports will need confirmation by appropriate internal investigation.

**Protection of suspect and patients**
Protection may be achieved by overview of the suspected abuser by a senior colleague, or his or her delegate, eg another consultant anaesthetist, or another trusted anaesthetic team member - in some circumstances perhaps a senior nurse or technician.

**In the event that suspicions are not confirmed, the case should be dismissed, but a report should be filed in the appropriate records of the head of department.**
VERIFICATION OF ABUSE
A retrospective audit, which may confirm the suspect’s escalating drug usage could be undertaken. A prospective audit of the suspect’s drug usage should also be considered.

Careful observation for signs and symptoms of misuse is essential, to produce the definite and documented evidence which is required for a successful intervention.

All evidence should be collated and documented

This process may take some time.

If there is definite evidence, then the relevant Medical Board/Council must be informed. Mandatory reporting requirements will apply. The relevant Medical Board/Council may participate in, or orchestrate, the intervention.

It may be necessary to contact a previous employer, although the necessity for privacy (Privacy Act) must be carefully considered.

INTERVENTION
Since denial is frequent, intervention should never be attempted on insufficient evidence. A more rapid intervention should be considered if major signs of this illness have been observed or documented, such as conclusive evidence of self injection or intoxication.

Intervention Planning
The intervention team may include the head of department, an expert in the field such as a psychiatrist, another senior colleague (a member of the Substance Misuse Committee if applicable), and a representative of the employer.

The Medical Board or Council must be informed of the circumstances of the abuse and abuser, and the actions the team intend to take. A representative of the medical board or council should be included as a team member if requested by those bodies; alternatively the registration authority may decide to lead the intervention.

The intervention team will vary in different countries, and in different Australian states and territories, according to local legislation, and the requirements of the relevant Medical Board or Council.

The team should decide in advance the plan for the intervention, including the post-intervention strategy and options.
**Intervention Meeting**

The intervention is best conducted early on a normal operating day when the anaesthetist in question is on duty.

The anaesthetist should be informed of the intervention on arrival at work, and concurrently given the opportunity to appoint an advocate.

**The anaesthetist should then be accompanied at all times for his/her protection against self harm.**

An effort should be made where possible for the chosen advocate to attend the meeting. In the event that this is not possible the intervention team should appoint a mentor to act on behalf of the anaesthetist under investigation.

The intervention team should ensure that the emotional and safety needs of the person under investigation are met.

The intervention team should conduct the intervention firmly and sensitively, aware of the need to take into account the interests of the anaesthetist, as well as being aware of the prime responsibility - to protect patients.

Introduce the members of the intervention team and explain in some detail the reason for the meeting.

State the evidence and allow a response. Control the dialogue carefully, as it is common to get side tracked from the central purpose of the meeting. Denial is common and often repeated, even when the abuser is confronted with conclusive evidence.

Outline the options available in accordance with those preferred by the Substance Misuse Committee, emphasising the possibility of voluntary engagement in treatment.

Reassure the doctor of continued support during treatment, and if he or she subsequently returns to work, and/or re-training.

**The intervention meeting will usually end with the anaesthetist under investigation being accompanied to the arranged detoxification unit by a member of the intervention team, or other qualified person.**

**The potential for suicide is high:** suicide has occurred when the anaesthetist has not been immediately admitted to a detoxification unit.
Early psychiatric risk assessment is recommended, particularly if discharge back into the community is considered. (This course of action is unlikely when the doctor is an anaesthetist using intravenous drugs).
Occasionally the doctor will need other types of treatment; this will be arranged according to the individual situation.

Record the results of the intervention meeting and subsequent treatment, and file with the other relevant confidential records.
TREATMENT OPTIONS

Treatment will be a matter for consideration by the members of the professional team who become involved in treating the doctor. It is not the role of the interveners or the department or the College to determine treatment or options.

However options may include:

**Voluntary treatment.**

An immediate psychiatric assessment may be recommended. Outpatient treatment is rare for anaesthetists who are substance abusers, as noted above, but may be possible.

Transfer to a detoxification facility (accompanied by the designated colleague or health care professional) for inpatient treatment as required.

Assessment and treatment of associated psychiatric disorders may occur, as well as “detoxification”.

Participation in Alcoholics Anonymous, Narcotics Anonymous, Doctors in Recovery, or other self-help groups is desirable, and may be required.

**Involuntary treatment.**

This may include:

- **Mandatory reporting to, and management by, the Medical Board or Council**

- **Following assessment, committal under the relevant Mental Health Act or Alcohol and Drugs Act.**

- A report to the police may be made. This report may initiate legal proceedings for theft, professional negligence, or breach of contract, for example under the Crimes Act, Employment Contracts Act, Misuse of Drugs Act or Medical Practitioners Act.

  *Since substance abuse is more an illness than a crime, reports to the police may be inappropriate, and are not mandatory. Suicide has been precipitated when the police have been involved.*

RETURN TO WORK

This requires assessment by appropriate bodies, usually the Medical Council or Board’s health assessment and monitoring committees.

The cooperation of anaesthetic departments in the development of a monitoring program and contract will be required if return to the anaesthetist’s previous work is appropriate.

The contract with the Board and/or Medical Council may include limitations on practice – eg in place and type of practice, hours worked, mentoring or professional supervision, restrictions on access to drugs.

It may also include workplace monitoring/supervision, prohibition on self-prescribing, and substance use monitoring, such as random urine screens, hair analysis, blood tests or breath tests.
Monitoring may continue for years, and include regular meetings with the Medical Board or Council. In some cases these doctors may need to be monitored and treated for the duration of their professional lives.

Alternatively retraining or a change in employment may be necessary. It may be appropriate to advise younger substance-misusing anaesthetists or trainees to seek a different career in medicine. Some anaesthetists may leave medicine altogether.

**ALCOHOL ABUSE**
This is an insidious disease which may take many years to reveal itself. Colleagues, friends, and family may have had suspicions that a colleague is abusing alcohol long before an event occurs.

**Intervention**
This should proceed along the same lines as for substance abuse, although the treatment of alcohol abuse may be easier, and may be conducted on an out-patient basis.

Denial, belligerence and aggression are frequently encountered if attempts are made to discuss the abuse with the doctor.

**Signs & Symptoms**
There are no specific signs and symptoms, but suspicion may be aroused by:
- Inappropriate (time/place) for the smell of alcohol on breath.
- Impaired performance and personality changes.
- Interpersonal difficulties with family, friends, or co-workers.
- Drinking excessive amounts of alcohol frequently.
- Drinking when it is dangerous to do so (such as during or before driving).
- Binge drinking - frequent excessive drinking.
- Legal problems related to drinking.
- Craving and loss of control.

**Physical dependence**
Withdrawal symptoms, such as nausea, sweating, shakiness, and anxiety after stopping drinking.

**Tolerance**
Those whose intake is high can develop tolerance to alcohol, so that intoxication is not always evident. The National Institute on Alcohol Abuse and Alcoholism has established two drinks per day for men and one drink a day for women as the limits to safe drinking.
**Treatment**
This is usually in a detoxification centre, with regular attendance at Alcoholics Anonymous often required.

**Further Reading:**


**beyondblue** 2013. National Mental Health Survey of doctors and medical students


Bryson EO. 2009. Should anaesthesia residents with a history of substance abuse be allowed to continue training in clinical anesthesia? The results of a survey of anesthesia residency program directors; Journal of Clinical Anaesthesia21:508-513

Chia AC, Irwin MG, Lee PWH et al. 2008. Comparison of stress in anaesthetic trainees between Hong Kong and Victoria Australia; Anaesthesia and Intensive Care; 36 (6): 855-862


**DSM IV** (Diagnostic and Statistical Manual of the American Psychiatric Association) Criteria for Psychoactive Substance Dependence and Diagnostic Criteria for Opioid Withdrawal. American Psychiatric Association Publications. [http://www.appi.org/Pages/default.aspx](http://www.appi.org/Pages/default.aspx)


Fitzsimons MG, Baker KH, Lowenstein E, Zapol WM. 2008. Random Drug testing to reduce the incidence of addiction in anesthesia residents: preliminary results from one program; Anesthesia and Analgesia; 107 (2): 630-635

Fitzsimons MG, Baker KH. 2009. Not all strikes are easy to call (editorial); Anesthesia and Analgesia; 109(3) 693-694

Fry RA. 2005. Substance Abuse by Anaesthetists in Australia and New Zealand; Anaesthesia and Intensive Care; 33:248-255

Fry R. 2006. Chemical Dependency Treatment Outcomes of Residents. Anes Analg 103(6) 1588


Medical Board of Australia: Guidelines for mandatory notifications. www.medicalboard.gov.au


Saunders D. 2006. Substance abuse and dependence in anaesthetists; Best Practice and Research in Clinical Anaesthesiology; 20: 637-643


**Older references which might be useful**


Keiter GI, Ryan CE, Miller IW et al. 1995. Role of the family in recovery and major depression; American Journal of Psychiatry; 52: 1002-8


Sivarajan M, Posner KL, Caplan RA et al. 1994 Substance abuse among anesthesiologists; Anesthesiology; 80:704


Appendix

SUBSTANCE ABUSE COMMITTEE

Departments and groups should consider the establishment of a Substance Abuse Committee

1.1 Committee composition

A Substance Abuse Committee (hereafter known as the Committee) should be appointed on an annual basis by the senior anaesthetic consultants within the department, and comprise three members, including:

i. a senior anaesthetic consultant who shall facilitate the Committee;
ii. another anaesthetist;
iii. an additional person who is not an anaesthetist, for example a Doctors' Health Advisory Service representative, or a substance use consultant or psychiatrist.

The composition of the Committee will reflect its primarily administrative function, and will not be set up for therapeutic purposes.

The Committee shall require a quorum of two members. Each member of the Committee shall be required to notify the other two members if he or she is unable to attend a meeting of the committee, but will be able to nominate a proxy from within the department.

1.2 Committee responsibilities

This document and the responsibilities of this Committee are primarily concerned with the misuse of drugs specifically more available to the anaesthetic profession and theatre staff. However all drug misuse is of concern, and may come within the Committee's brief, for example alcohol misuse.

The Committee's responsibilities may include the following:

- To safeguard the interests of anaesthetists, health care workers (hereafter known as "staff") and patients by ensuring responsible drug handling.
- To promote preventative education on drug use.
- To promote appropriate self-care policies and practices by staff.
- To co-ordinate drug administrative control procedures.
- To receive and evaluate reports of drug misuse.
- To co-ordinate investigation of reports of drug misuse which appear well-founded.
- To ensure that the requirements of Mandatory Reporting to the Medical Board or Council are followed.
● To appoint an intervention team when necessary to ensure that personnel who are found to be misusing drugs cease clinical work and are admitted to treatment
● To develop contacts and a resource file for relevant treatment agencies and professionals.
● To monitor treatment and follow-up support.
● To co-ordinate the occupational re-training or re-entry into the workforce of drug misusers.
● To consult with those who negotiate re-entry contracts to ensure that appropriate provisions are included, eg supervision and monitoring of a recovering anaesthetist.
● To hold regular meetings, and other meetings on an ad hoc basis, when the need arises to consider a case of reported drug misuse.
● To maintain confidential written records of reports of cases of drug misuse, and related information.
● To conduct annual reviews of the effectiveness of preventative schemes, safety net policies and procedures.
● To ensure that all parties, including hospital administration, are aware of the nature, epidemiology and outcomes of drug misuse.

2. MENTOR ROLE
Within the anaesthetic department at least one consultant should be appointed as a general mentor or welfare officer by the Committee, to have a counselling, advocacy, liaison, feedback and referral role.

The mentor should not have managerial authority, nor be the director of training.
The mentor should have a knowledge and interest in substance use

The mentor should be appointed after consultation with the whole department (including all junior members) by consensus

The mentor or another person may wish to initiate and/or co-ordinate regular meetings of the department for support purposes, and to discuss stressful work-related issues.

3. PREVENTATIVE EDUCATION POLICY
The Committee will promote and co-ordinate comprehensive preventative education on licit and illicit drug use and misuse (eg alcohol, marijuana, opioid drugs, tobacco) by staff.

Preventative education would be directed towards encouraging overall health, and discouraging the potentially harmful misuse of anaesthetic drugs.
Strategies include:

- An operational plan of preventative education outlining goals and objectives, methods, core syllabus etc.
- Regular relevant input at tutorials, journal clubs etc.
- Regular relevant input at occasions involving partners.
- Use of the skills and expertise of professionals from other disciplines in relevant areas

4. ANAESTHETISTS' SELF CARE POLICY
The Committee should promote appropriate self care practices in all staff through education, managerial supervision, and other means including

- Encouragement of up to twice yearly regular medical checkups with a personal general practitioner
- Encouragement of stress management and relaxation techniques eg regular physical exercise
- Active monitoring of workloads to avoid work-related stress; (anaesthetists' long hours to be reported to the anaesthetic department)
- Discouragement of self-prescription and self-medication, or by a close family member

5. ADMINISTRATIVE CONTROL PROCEDURES
The Committee may co-ordinate the implementation and monitoring of the following potential control procedures:

- Restricted access (ensuring decreased availability) to chemical substances which may potentially be misused.
- Review of written records of all drugs ordered, dispensed, administered, damaged and returned unused, and the specific use for which they are intended, by comparing drug register and patient records.
- Organisation of random audits by a suitable person eg a pharmacist, to look for discrepancies or errors, and to ensure that drug use is consistent with patient need.
- The requirement for concrete evidence of breakage or damage, plus adequate explanation, before replacement drug is issued.
- Opioid and non-opioid drugs with potential for misuse, together with the drug record, to be locked in a secure cupboard, which requires the use of two keys to open.
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