

# Management of the agitated patient in the emergency department

VÍCTOR FERNÁNDEZ GALLEGO<sup>1</sup>, EDUARDO MURCIA PÉREZ<sup>2</sup>, JUAN SINISTERRA AQUILINO<sup>3</sup>,  
CARMEN CASAL ANGULO<sup>4</sup>, MARÍA CARMEN GÓMEZ ESTARLICH<sup>1</sup>

<sup>1</sup>UVI Móvil Motilla del Palancar. Cuenca, Spain. Gerencia de Urgencias, Emergencias y Transporte Sanitario.

<sup>2</sup>Departamento de Medicina Legal y Preventiva. Facultad de Medicina. Universitat de València, Spain. <sup>3</sup>UVI Móvil de Almansa. Gerencia de Urgencias, Emergencias y Transporte Sanitario, Spain. <sup>4</sup>Servicio de Ayuda Médica Urgente (SAMU). Valencia. Servicio de Emergencias Sanitarias, Spain.

## CORRESPONDENCE:

Víctor Fernández Gallego  
UVI Móvil Motilla del Palancar  
Ronda Sur, s/n  
(Parque de Bomberos)  
16200 Motilla del Palancar  
Cuenca, Spain  
E-mail: victorf@sescam.jccm.es

## DATE OF RECEIPT:

15-11-2007

## DATE OF ACCEPTANCE:

13-5-2008

## CONFLICT OF INTEREST:

None

Agitated patients must be managed fairly often in routine emergency department practice. After safety measures are taken during initial assessment, a tentative diagnosis based on the cause of agitation (physical condition, underlying mental disorder, or extreme anxiety) should be made. That diagnosis will facilitate possible resolution of the problem through dialog with the patient or through physical restraint. If restraint is chosen, the manner of proceeding should be planned and at least 5 persons should be involved. The restraining maneuver is usually followed by administration of benzodiazepines, neuroleptic agents, or a combination of both in order to assure sedation. It is important to remember that these patients pose a threat to their families, emergency room staff, and themselves; therefore, they are candidates for voluntary or involuntary admission to a psychiatric unit. If that is the course of action chosen, admission must comply with the law and adequate restraint and sedation should be prescribed. All such actions should be recorded in the emergency department's report to the psychiatrist on duty, who will be the admitting physician. [Emergencias 2009;21:121-132]

**Key words:** Agitation. Emergency services, psychiatric. Physical restraint.

## Introduction

Psychomotor agitation is defined as a state of marked mental excitation accompanied by purposeless motor activity<sup>1</sup>, which may vary from slight restlessness to vigorous uncoordinated movements. This state involves serious risks of physical harm for the patient (self injury), family members, healthcare staff (generalized aggression), and for other people and objects in general. These are situations traditionally managed by practising physicians using varied and controversial methods, which in the past included shackles, stocks and cages, as well as strap-chairs and straight jackets<sup>2</sup>. Not infrequently, physicians today still face such situations in the settings of Emergency Department (ED), Mental Health and other centres attending patients with psychiatric disorder, drug addiction and alcoholism<sup>3</sup>.

The agitated patient should not be mistaken for the violent patient "per se". The latter creates a

problem of order and safety that should be dealt with by security guards, although the boundaries between the two kinds of patients may be difficult to establish. The agitated patient may manifest nervousness and fury, but also euphoria, and frequently inappropriate laughter, crying and shouting<sup>4</sup>.

Psychomotor agitation is by no means an exclusive characteristic of psychiatric patients, as will be discussed later in this review. Some of these patients attended at ED or psychiatric units have demonstrated violent behaviour<sup>5</sup>.

## Etiology

Agitation is sometimes the manifestation of a medical disease, of extreme anxiety, or of underlying mental disease. When psychomotor agitation is accompanied by altered states of consciousness, it is known as delirium<sup>6</sup>. Before any therapeutic

decisions are taken, it is important to establish a presumed differential diagnosis to categorize the patient in one of these three diagnostic groups. The presumed diagnosis will orient the therapeutic approach; it will be made on the basis of symptomatology (level of consciousness, language etc.) as well as on information provided by family members, friends or witnesses (psychiatric or medical history of organic disease, precipitating factors, drug use or withdrawal, form of onset, previous episodes and duration etc.). On occasions, a reliable detailed clinical history can only be obtained after restraint of the patient.

### *Organic mental disorder*

As in all psychiatric emergencies, the priority is to rule out organic cause requiring specific treatment. Diverse systemic disorders of the central nervous system as well as drug abuse affect cerebral function, and may generate psychomotor agitation which generally manifests as acute confusional syndrome or delirium, with particular characteristics (Table 1); this picture rarely resolves with verbal restraint, making patient immobilization necessary<sup>3</sup>.

Organic disorders that may induce psychomotor agitation are shown in Table 2. These patients are more frequently admitted to general hospitals<sup>7</sup>.

### *Psychotic disorders*

Patients with paranoid-type schizophrenia are more likely to present psychomotor agitation, in the context of de-compensation or exacerbation of their disease for any reason. Positive symptoms that intensify with disease exacerbation (irrational ideas, hallucinations etc.) often lead to aggressive or self-injury behaviour, which may appear quite suddenly despite apparent quiescence observed immediately beforehand.

The difference between schizophrenic or other psychotic patients and those with delirium of organic origin is basically the altered state of consciousness always found in the latter.

Another psychiatric condition also associated with psychomotor agitation is manic-phase bipolar disorder, especially when it evolves with psychotic symptoms. Delirious mania may manifest in aggressive behaviour, generally accompanied by euphoria, loquacity and grandeur. Normally, the patient has been previously diagnosed with bipolar disorder bipolar. This is the patient with the most dangerous functional disorder<sup>8</sup>. Generally, in patients with psychotic-type de-compensation, the verbal restraint approach is rarely

**Table 1.** Characteristics of acute confusional syndrome or delirium

- History of organic pathology. Possible history of substance abuse (or withdrawal).
- Acute onset.
- Fluctuating evolution during the day.
- Altered state of consciousness (confused or dazed state).
- Spatial and temporal disorientation.
- Difficulty with maintaining attention.
- Disorganized thought processes: incoherent language, hallucinations, alteration of sleep-wake cycle, recent memory deficit,...
- Semiology indicative of the cause of agitation: febrile syndrome, neurovegetative alterations (AHT, diaphoresis, tachycardia,...), neurological focality (aphasia, motor or sensory deficit, neck rigidity, meningeal signs etc.).

AHT: arterial hypertension.

effective due to the patient's loss of contact with reality, but this must be attempted anyway, although recourse to physical restraint and neuroleptic medication may be necessary. This form of presentation, frequently associated with substance abuse, is most commonly observed in emergency departments (ED)<sup>9</sup>.

### *Non-organic, non-psychotic disorders*

This category includes patients with non-psychotic personality disorders and those presenting psychomotor agitation as a reaction to particular factors:

- Reactive or situational agitation (adaptive disorder). Aggression or agitation is produced by new contexts or situations to which the patient is unable to adapt.
- Acute stress induced by situations perceived as catastrophic. The patient may react with behaviour such as fury, rage and aggression, or even present a picture of apathy and a semi-catatonic state (depersonalization).
- Emotional stress, induced by life events such as accidents, death of a family member etc. (mourning).
- In children, acute stress induced by sexual abuse or maltreatment. This possibility should be

**Table 2.** Organic causes of psychomotor agitation

- Dementia: Alzheimer, vascular D., secondary to other diseases such as Pick's, HIV etc.
- Epilepsy, especially of the temporal lobe.
- Drug abuse: cocaine, phencyclidine ("angel dust"), opioids, alcohol, hypnotics.
- Drug withdrawal syndrome.
- Alcohol withdrawal syndrome, with a picture of Delirium tremens.
- Metabolic or endocrine alterations such as hyperthyroidism, carcinoid syndrome, ionic disorders, intermittent acute Porphyria.
- Fever/hyperthermia.
- Hypo/Hyperglycaemia.
- Encephalopathy: anoxic, uremic, hepatic, hypertensive etc.

investigated on detection of sudden behavioural change or aggressive behaviour in a child without previous pathology, history of psychosis or substance abuse<sup>10</sup>.

– Sensorial privation, which may trigger aggressive or agitated behaviour. psychomotor agitation is a relatively frequent picture after eye surgery involving visual privation, and may also occur in critical care patients after sedative withdrawal. This increases with age and severity<sup>11</sup>. The consequences may be self-extubation, removal of catheters, drainage tubes and other invasive monitoring devices.

In this group, verbal intervention is usually more effective since there is no alteration of consciousness: there is also greater acceptance of psychological support and occasionally medication (generally anxiolytics) but if refused, it is often necessary to resort to physical restraint.

## Therapeutic approach

The approach should be directed at treating the cause underlying the agitation. A frequent error is to assume a psychiatric origin, without having ruled out a potentially vital process such as hypoglycemia, subarachnoid haemorrhage, meningoencephalitis, subdural haematoma etc.<sup>1</sup>. Management of the agitated patient is based on four main principles (Figure 1): safety measures, verbal intervention, physical constraint and pharmacological constraint.

### General approach and safety measures

If intervention is required in an out-of-hospital situation, as much information as possible should be obtained from the co-ordinating centre before entering the place. Once there, a rapid appraisal of the situation is required; safety measures must be given priority, and the intervening physician should consider whether emergency ambulance services are needed. If the intervention takes place in a hospital setting, all possible information should be obtained from the clinical history.

### Safety measures

Above all, safety of the staff, patient, family members and surroundings must be ensured<sup>12</sup>.

Thus, in the presence of weapons, dangerous objects or when other risks exist, the staff should allow the security guards to intervene first if physical restraint is deemed necessary. Agitated patient behaviour is by definition unpredictable and the following safety measures allow the physi-

cian to approach the patient without safety concerns that may interfere with the evaluation<sup>13</sup>:

– Ensure the presence of security guards or equivalent forces (at the home, consulting rooms or hospital). The patient must be informed about the situation. Often, the mere presence of security guards will dissuade the patient from taking aggressive action.

– If the patient is attended in a consulting room or other habitual work space, an escape route should be planned in case of violent behaviour. The attending space or area should preferably be wide, with two exits whose doors cannot be locked from inside. If possible, a bell alarm should be available nearby. Such patients should not be approached in passages, corners or distant places. In unusual places (public spaces, homes etc.), exits, obstacles and escape routes should be appraised before approaching the patient, and precautions taken with objects that may be used as weapons, including pencils and ashtrays, etc.

– Avoid close contact with the patient. The patient should not be allowed to get between the physician and the exit.

– Avoid turning one's back on the patient.

– Create as calm an atmosphere as possible, avoiding external stimuli, such as music, shouting, bright lights etc.

– Be aware of signs of imminent sudden action.

### Verbal restraint

The first line of intervention is to develop dialogue with the patient. In this phase, a member of the family or companion may contribute. This is most effective in cases of slight to moderate *psa*, and especially with psychiatric patients, thus avoiding the need for physical constraint. The following steps are required:

– Introduce oneself as the attending physician

– Provide information. The patient must be informed at all times what action is to be taken. Avoid threats and false promises. Offer reasonable expectations.

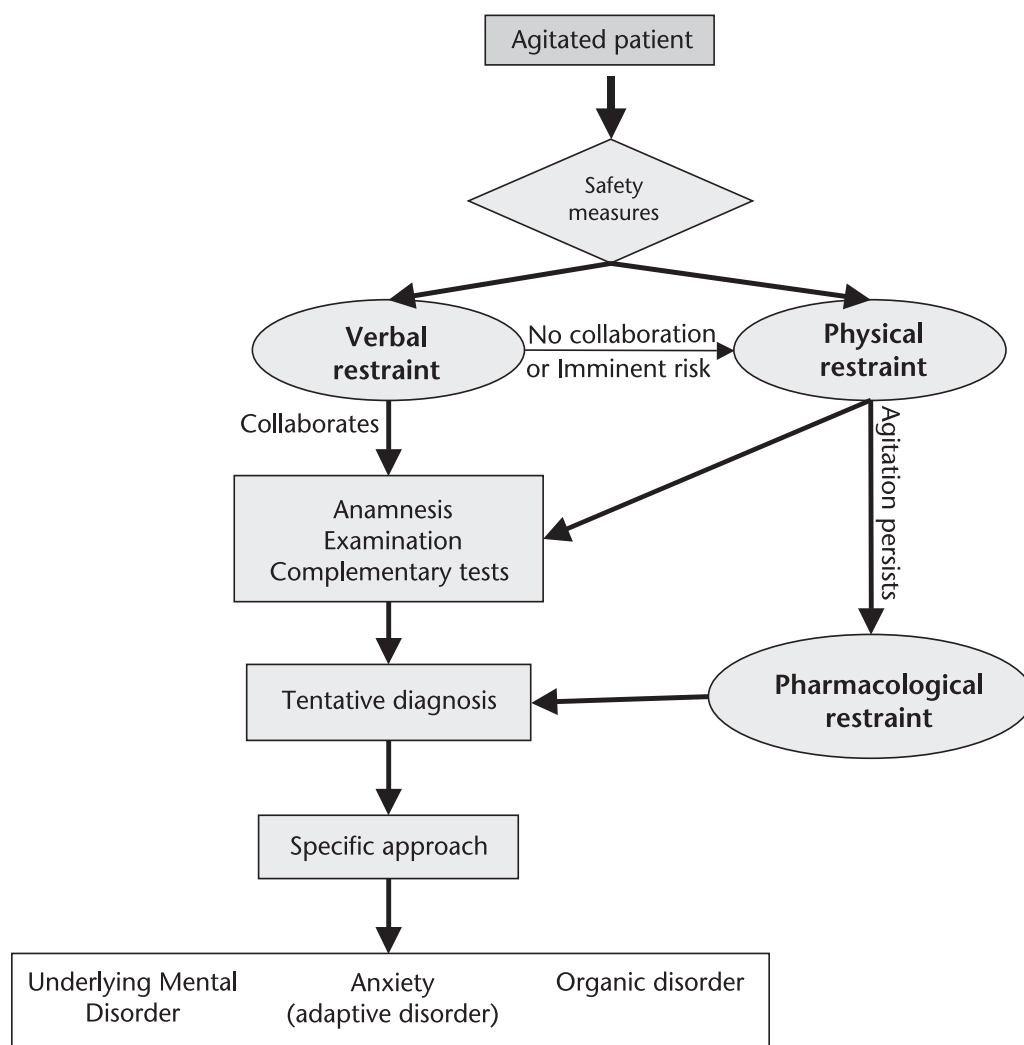
– Adopt a reassuring but firm attitude (seemingly calm and in control of the situation).

– Use quiet conversation, short questions and actively listen to the patient, avoiding confrontation or opposition to the patient's ideas or attitude. Communicate what behaviour is or is not acceptable.

– Attempt to sit on the other side of a large obstacle (table, armchair etc.).

– Avoid prolonged eye contact.

– Attempt to offer something (to eat or drink) that may favour dialogue.



**Figure 1.** Flow chart of action for management of the agitated patient.

– Be aware of signs of imminent violent behaviour, including higher voice tone, insolent or foul language, muscular tension (chair gripping etc.), nervousness, hyperactivity (hand rubbing, pacing up and down), side glancing etc.

The most important sign of imminent violent behaviour is patient motor activity<sup>14</sup>. Ignoring such gestures of possible violent behaviour is dangerous.

– The presence of family members should be considered. Such people and others may be a source of useful general information (history, substance abuse, family situation, social network) and the circumstances surrounding the present crisis.

– Consider offering oral sedatives (diazepam, haloperidol) and even parenteral medication, which some patients, especially those with adaptive disorders, will accept.

### *Physical restraint*

This is an exceptional measure used as a last resort when other strategies have failed<sup>15</sup>.

However, it may also be the first in cases of extreme agitation with imminent risk of aggression or attempted suicide. In the latter situation, the behaviour must be carefully evaluated in terms of manipulative rather than real intentions, taking into consideration the lethal nature of the threat<sup>16</sup>. Physical restraint is also indicated in patients whose agitated behaviour impedes therapeutic measures (withdrawal of catheters, drainage tubes etc.)<sup>17</sup>. Before applying physical restraint, the patient must be informed about the reason and what the therapeutic options are, always being offered the possibility of pharmacological treatment. It must be explained that this measure has a therapeutic function and is not a punishment<sup>8</sup>. Occasionally, the mere presence

and clear intention of the restraining team produces a change of attitude and willingness to cooperate.

Evaluation of pathology-induced agitated behaviour does not require sophisticated psychiatric speculation: experience and common sense of any healthcare professional is sufficient<sup>6,7</sup>.

Physical restraint is obviously performed against the patient's will and thus requires rapid and co-ordinated action; this involves prior planning. Physical restraint entails risk for the patient and probably some increase in anxiety and aggressive behaviour, especially initially, as well as some further but minor complications<sup>18</sup>, and cannot be considered a definitive measure. However, the patient normally calms down soon after being restrained.

The staff should have previous training and work as a team of 5 people, or 3 in the case of children weighing less than 50 Kg<sup>10</sup>. It is a mistake to attempt physical restraint without sufficient means and forces<sup>19</sup>. The team must work according to a plan, otherwise the effort may fail, with unnecessary risk. Once the decision has been made to apply physical restraint the verbal approach should no longer be attempted<sup>6,8</sup>.

#### *Method of physical mechanical restraint*

1. A basic principle is that one professional – generally the physician – directs proceedings (leader), and will normally be responsible for the patient's head. Nursing staff may also perform the restraint, while the physician in charge of the case performs the evaluation and confirmation<sup>7</sup>.

2. Determine a plan; one person will be situated behind the patient's head and the others will each hold a limb (previously assigned). All should be wearing gloves.

3. The patient is reduced to the floor, face up. The leader gives instructions, holds and protects the patient's head: the others each restrain their assigned limbs (Figure 2), ensuring immobility of the shoulders, elbows and knees (Figures 3 and 4), at the same time reducing the risk of injury, especially fractures. If the agitated patient requires transfer (to a room, ED cart, ambulance), he will be lifted by the knees and elbows and supported under the shoulders, then placed on a bed or cart. The wrists and ankles are tied to the rails and safety belts applied (Figures 5 and 6).

Some authors recommend the prone decubitus position<sup>20</sup> as more advantageous than the supine decubitus position, since it avoids head banging against the hard surfaces of the bed/cart and is associated with faster resolution of crisis. However,

it is also associated with cases of sudden death by positional asphyxia<sup>21,22</sup>, especially in obese patients or when pressure is applied to the back<sup>23</sup>. Other authors recommend the supine decubitus position with an inclination of 30°<sup>24</sup>. We consider that the prone decubitus position allows better control and vigilance of the patient, and facilitates venous access for the administration of drugs, especially sedatives if required.

The restraints must be periodically checked for comfort and safety. If prolonged, each restraint will be released in an alternate manner every 30 minutes to prevent the risk of thromboembolism, although prolonged restraint is not usually necessary after chemical restraint.

In out-of-hospital settings, the team will have to make adaptations according to the available resources. Mobile intensive care units (ICU) should be equipped with approved restraining material and devices, but in their absence crepe bandages or similar material may be used. In this context, a most useful device is an adjustable folding bed (unfolded), used with the convex side towards the patient and with some pressure applied. Special attention must be paid to ensuring free air space around the head of the patient; the upper and lower extremities should be contained within the structure (Figure 7). Further devices may complement this, such as the spider harness (Figures 8 and 9).

This physical restraint is only provisional, until such time as the acute phase of agitation is resolved.

Mechanical restraint is a highly stressing situation for the patient which may exacerbate agitation, and is only required as a preliminary step before pharmacological sedation if the agitation does not diminish. Removal of restraints should be performed progressively, while observing patient response. One extremity at a time is released every 5 minutes, except for the last two which must be released together. Leaving only one restraint in place on a single extremity should never be done to prevent the risk of self injury. In the case of a *psa* patient brought to ED handcuffed and accompanied by police or security officers, the same above-mentioned safety measures should apply before medical evaluation of the patient. The patient may be freed after initiation of treatment and its effects (sedative, if chosen) are apparent. It should not be forgotten that we are here dealing with a detainee: the risk of attempted escape must be considered before removing the physical restraints, preferably in the presence of security officers.



**Figure 2.** Manual restraint by five people; one holds the patient's head while the other four each restrain one extremity.

Intensive care patients may require physical restraint to avoid treatment interruption or monitoring; this can involve wrapping the hands in cotton wool and bandages (like "boxing gloves"), which allows free movement of the arms but restrains the fingers, or the patient's extremities may be tied to the bed rails<sup>11</sup>.

#### *Pharmacological treatment*

The indication for urgent chemical therapy and the route of administration will depend on the degree of agitation and the tentative diagnosis. Generally, parenteral administration is chosen, with intravenous (IV) injection being preferred for its rapid effect as compared with intramuscular (IM) injection. However, obtaining an IV access in patients with acute psa may be difficult and usually requires prior physical restraint. If the oral



**Figure 3.** Close-up view showing manual restraint of the upper left arm, immobilizing the shoulder and elbow.



**Figure 4.** Close-up view showing manual restraint of the lower limbs.

route is chosen, ideally it should be in liquid form and ingestion can be checked. The sublingual route is also efficient in this situation. Studies indicate that 64% of ED psychiatric patients prefer psychotropic medication to restraint or confinement<sup>25</sup>.

#### *Slight and moderate cases*

During the verbal phase, we offer sedative medication, oral or sublingual, habitually rapid absorption benzodiazepines such as diazepam (Valium<sup>®</sup>, 5 and 10 mg), alprazolam (Tranquimazín<sup>®</sup>, comp. 0.25, 0.5, 1 and 2 mg), lorazepam (Orfidal<sup>®</sup>, Idalprem<sup>®</sup>, comp 1.5 mg), dipotassium chlorazepate (Tranxilium<sup>®</sup>, 5, 10,15 and 50 mg), or neuroleptics such as Haloperidol (tab. 10 mg, drops 10:1 mg in phials of 15 and 30 cc) or Levopromacina (Sinogan<sup>®</sup>, comp 25 and 100 mg, drop sol at 4%, 1:1 mg). In general, if the patient does not present psychotic symptoms, the choice of drug is a benzodiazepine for cases of drug abstinence syndrome or intoxication; if on the other hand the patient has manic schizophrenia, mental retardation or personality disorder, then neuroleptics are indicated. Given that the immediate effect we seek is sedation, not control of psychotic symptoms, we recommend using a combination of both classes of drugs, regardless of the diagnosis<sup>26</sup>. Studies comparing benzodiazepines and haloperidol have shown the former to produce sedation more rapidly, which shortens the period of agitation or violence<sup>27</sup>. If a history of pharmacological restraint exists, the response to particular agents should be taken into consideration.

The indications and possible adverse effects of these drugs must be known, as well as the treat-



**Figure 5.** Close-up view showing wrist restraint tied to the bed rails.

ment for such effects, so in emergency situations it is preferable to use those with which the team has had most experience.

Pharmacological sedation should be appropriate and rapid, to be able to withdraw it as soon as possible. Doses will vary with the patient characteristics, possible substance abuse or concomitant medication. In the elderly, half doses should be used. Once the class of drug has been selected, the precise one or ones must be chosen (Table 3).

### Benzodiazepines

These drugs produce rapid and efficient sedation. The route is IV, although IM midazolam offers rapid absorption and has a good safety profile. There is a risk of respiratory difficulty, especially in patients with bronchopathy; the antidote is flumazenil (Anexate®, vials 0.5 mg/5 ml).

The most widely used are:



**Figure 6.** Close-up view showing ankle restraint tied to the bed; the patient is in the prone decubitus position.



**Figure 7.** Emergency mechanical restraint bed.

- Midazolam (Dormicum®, vials 15 mg/3 ml or de 5 mg/5 ml), IV administration, initial dose 0.1 mg/Kg. Preferably diluted in saline solution. IM administration is an efficient alternative, with response time of 6 minutes.

- Diazepam (Valium®, vials de 10 mg/2 ml), IV or IM, although IM administration is associated with erratic absorption.

- Dipotassium chloracepate (Tranxilium®, vials of 20, 50 and 100 mg), dose 50 mg IV.

### Neuroleptic drugs

The initial objective is not to treat psychotic symptoms which may require several weeks, but rather to control within 30-90 minutes the hyperactivity, excitation and anxiety. The most frequent adverse reactions are extrapyramidal symptoms, treated with biperidene (Akineton®, vials 2 mg); incidence is reduced when combined with benzodiazepines. The most widely used are:

- Haloperidol (Haloperidol®, vials of 5 mg). This is the treatment of choice for ps<sup>12</sup>. Initial dose is 2.5-10 mg IV or IM, repeatable every 30 min until sedation is achieved or up to a maximum safe dose of 30 mg in 24 hours.

Some authors recommend combination with biperidene 2 mg IM to reduce the risk of adverse extrapyramidal effects<sup>4</sup>, although this preventive effect is controversial.

- Chlorpromazine (Largactil®, vials of 25 mg), a phenothiazine, dose 25 mg IM (never direct IV), repeatable every 2-4 hours until sedation. It has greater sedative effect than haloperidol, but reduces the seizure threshold. Adverse effects include hypotension, dry mouth, blurred vision, constipation or urinary retention.

- Levomepromazine (Sinogan®, vials of 25 mg). This is the most sedative neuroleptic; used with



**Figure 8.** Spider harness.



**Figure 9.** Patient restrained with a spider harness.

doses of 25-50 mg IM (never IV), every 2-4 hours until sedation or maximum safe dose of 200 mg.

More recent strategies include atypical antipsychotics for the treatment of psychiatric emergencies such as *psa*. In general, these have prolonged half-life and greatly variable formulations:

liquid (risperidone, Risperdal®; zuclopentixol, Cisordinol®, Clopixol®); rapidly dissolving tablets (olanzapine, Ziprexa®; risperidone) or IM injection form (olanzapine, zuclopentixol), allowing initial parenteral treatment followed by oral treatment with the same drug. These present fewer extrapyramidal effects<sup>29</sup> compared to conventional options such as haloperidol or chlorpromazine, as well as better tolerance, and have been widely accepted for the effective management of agitated patients. However, cost and inexperience limit their use, despite their safety profile.

#### *Guidelines for treatment*

Whenever possible, treatment should be etiologic. The combination of benzodiazepines and neuroleptics is safe, effective and reasonable, and more effective than administering each drug separately; and they mutually help protect against adverse drug reactions due to their different mechanisms of action, as well as producing more rapid effects than if used alone<sup>30</sup>. Treatment doses must be tailored to each patient's characteristics (age, weight, substance abuse etc.).

#### *Etiologic treatment*

Etiologic treatment will depend on the cause of the psychomotor agitation. Occasionally, accurate diagnosis made during the restraining procedure (hypoglycemia, for example) may allow ex-

cluding the need for sedation, but this is rare given the situation of stress, lack of co-operation<sup>26</sup>, and the impossibility of performing complementary studies and anamnesis.

Etiologic treatment includes general measures including control of vital signs, hydro-electrolyte balance and metabolic parameters, adverse drug reactions and lesions produced before or during restraint. Etiologic treatment is often slow to act, primarily at the psychomotor level, which is why other therapeutic measures are required.

#### *Vigilance and transfer*

Vigilance and control of the the agitated patient during transfer involves:

- Never leave the patient alone, despite immobilization.
- Check periodically that the restraints are secure.
- Check that the restraints are "comfortable", effective but not causing harm or lesions such as rash, friction burns, circulatory constriction (check the pulse rate).
- Avoid stressing stimuli. Ambulance lights, not sirens, should be used but not cause additional stress; avoid sudden acceleration and braking.
- Check for adequate non-stressing cabin temperature and air-flow.
- Observe patient behaviour, state of consciousness, and periodically check the vital signs (blood pressure, cardiac and respiratory rate and glycaemia levels).
- If the patient is sedated, it is recommendable to monitor ECG and oxygen saturation, as well as to perform secretion aspiration.

Transfer should be to an appropriate hospital: if an organic cause is suspected, to a general hos-

**Table 3.** Drugs habitually used to treat psychomotor agitation

Drug	Commercial name	Standard dose	Route of administration	Alternative route	Onset of Action	Adverse effects
Chlorpromazine	Largactil®	25-50 mg	IM	---	30-60'	Hypotension, extrapyramidal, symptoms, late dyskinesia, extrapyramidal, symptoms, late dyskinesia, respiratory and cardiac depression
Haloperidol	Haloperidol®	5-10 mg	IV, IM	Oral	20'	
Midazolam	Dormicum®	2-5 mg	IV, IM	---	1'-5'	
Diaepam	Valium®	2-10 mg	IV, IM	Oral	15'-45'	
Alprazolam	Tranquimazin®	0.25-1 mg	VO	---	45'-90'	
Loracepam	Idalpren®, Orfidal®	0.5-2	VO	----	15'-20'	

IV: Intravenous; IM: Intramuscular; VO: oral.

pital; if a psychiatric cause is suspected, to a hospital with psychiatrist attention 24 hours a day. The mode of transfer depends on patient state. If the patient is co-operative, standard ambulance service or family vehicles may be used, but always accompanied. If the patient is mechanically restrained, a psychiatric transport unit is required; by defect, a basic life support (BLS) unit is required. If the patient has been sedated, a BLS ambulance is necessary, with monitoring to avoid the risk of bronchoaspiration.

It is most important that the physician make a written record of all the details of the situation (including lesions produced and material damage done), the therapeutic measures adopted and the outcomes), primarily for possible legal repercussions but also for further preventive, therapeutic or staff training purposes<sup>31</sup>.

## Internment

Three circumstances apply here:

– Voluntary internment: the term presupposes lack of difficulties, but controversy surrounds this circumstance. Complete psychiatric assessment is necessary, including morbidity, history, reasons for request, social support etc Patients seeking a treatment environment must be distinguished from those primarily seeking attention, escaping from social conflict or judicial processes.

– Involuntary internment: a judicial order is required, after psychiatric or forensic medical reports. When an emergency physician is needed, the patient is usually co-operative. If not, the previously described measures are taken.

– Emergency involuntary internment, in the context of acute phase psychiatric pathology, without previous judicial order. This may be ordered by the physician immediately and then, within 24 hours, reported to the judge for legal endorsement. Physician-ordered internment involves the violation of a

fundamental constitutional right to freedom, as stipulated in article 1732. The internment must be confirmed by a psychiatrist or the duty physician of a reference hospital. It is important that the physician must provide a detailed report of the circumstances and reasons for this measure, especially so sedation has been used; this report contains the information required by the judge. The legal framework for this type of emergency internment is outlined in article 763 of the Law 1/2000 of 7 January, which replaces and amplifies article 211 of the Civil Code (derogated by this law).

Article 763 says: “Internment for psychic disorder reasons of someone incapable of making the decision himself, although under state custody, requires judicial authorization. This will be prior to the internment, except if emergency reasons make the measure necessary, when the judge shall be informed as soon as possible and within 24 hours. In all cases, internment of minors shall only be performed in health centres that are adequate for their age and after report from official services for the attention of minors”.

Emergency internment is a legal instrument allowing a physician to provide a solution to a health-related problem (“medical problem, medical solution”)<sup>33</sup>, with subsequent judicial control, bypassing the judge beforehand. In general, when the threat of violent behaviour is evident, it is preferable to intern a patient against his will than to face the legal consequences of harm inflicted on the patient himself or on others<sup>8</sup>. Access denied to the home of a mental patient requires authorization by a judge, except in cases of utmost necessity, when it must be performed by the police force.

### *Who takes the decision?*

Any physician is able to take this decision; it need not be a specialist in either emergency medicine or psychiatry. Suspicion based on duly established clinical criteria (such as risk of suicide at-

tempt, loss of impulse control, manifest aggressiveness, history etc.) is sufficient for forcible transfer and admission. The functions of the physician in these situations are: – To issue a provisional diagnosis of psychiatric or mental disorder, the only cause considered here. – To determine that the characteristics of the situation correspond to an emergency. – To decide whether to use physical restraint, and chemical sedation which the physician will prescribe. – To write the required report.

– To give instructions, to both healthcare staff and law enforcement officers or others involved.

– To decide on involuntary transfer and emergency internment, to be confirmed by a psychiatrist or the duty physician of a reference hospital. – To decide on the most appropriate manner of transporting the patient: with a family physician or members, type of ambulance or even a mobile ICU. It is categorically not recommended to transfer such patients with others. It should not be forgotten that this is an involuntary emergency transfer to a reference hospital (or psychiatric centre). – To care for the patient, monitoring vital signs, especially if heavily sedated – To indicate whether law enforcement officers should or should not escort the ambulance, or accompany the patient if there is a risk of violent behaviour or escape, since the physician is also bound to “help and protect the people involved and ensure the conservation of material at risk”.

If the intervention takes place within a municipality, the Municipal Police will be called in; if the destination or the intervention is outside the municipal boundaries, other supra-municipal forces will be required (the Civil Guard, National or Autonomous Police forces). – To report to the duty judge within 24 hours, for subsequent custody and control over the freedom of the patient. The judge may solicit the relevant reports from the admission centre and the forensic physician as to the state and evolution of the patient, and will decide within 72 hours, not about patient discharge, but whether the patient is unnecessarily deprived of his freedom because of the internment; for this the judge will solicit all the relevant reports (psychiatric, forensic, social services etc). Patient discharge corresponds to the physician responsible for treatment, and such discharge must be made known to the judge.

## References

- Muñoz Ávila J, Martínez Grueiro M, Montero Pérez FJ, Jiménez Murillo L. Manejo en urgencias del paciente agitado. En: Medicina de Urgencias y Emergencias. Guía Diagnóstica y Protocolos de Actuación. 2ª ed. Madrid: Harcourt SA; 2002. p. 609-14.
- Livianos Aldana L, Magraner Gil A, Rojo Moreno L, Rojo Moreno L. La liberación y contención del loco en la praxis terapéutica de la España decimonónica. An Psiquiatría 1987;3:76-81.
- Martínez A, Hinojal R. Manejo del paciente violento en prisión. Rev Esp Sanid Penit 1998;1:13-19.
- Muñoz Ávila J, Torres Murillo J, Calderón de la Barca Gázquez JM, Berlango A, García Criado El, Jiménez Murillo L. Manejo en urgencias del paciente agitado o violento. Semergen 1999;6:532-6.
- Calcedo Ordoñez A, Molina Rodríguez V, Arango López C. Cuidados y tratamiento de paciente violento (1ª parte). An Psiquiatría 1994;10:135-9.
- Pérez González S. Protocolo de restricción de movimientos. Enfermería Global. 2003; 2 (Disponible en URL: [www.um.es/eglobal/](http://www.um.es/eglobal/))
- Protocolo de Contención mecánica de movimientos. Hospital Universitario 12 de Octubre. Grupo de trabajo de contención mecánica; Madrid 2003.
- Mc Coy MC. Violencia en la sala de urgencias. En: Tintinalli JE, Kelen GD, Stapczynski JS. Medicina de Urgencias 5ª ed. México: Mc Graw Hill; 2002. P. 2236-40.
- Sanz Gil R, Vázquez Souza M, Oca Bravo L, Soler Roibal A. Perfil del paciente violento en urgencias. An. Psiquiatría 2001;17:358-63.
- Jiménez Busselo MT, Aragón Domingo J, Nuño Ballesteros A, Loño Capote J, Ochando Perales G. Atención al paciente agitado, violento o psicótico en urgencias: un protocolo pendiente para una patología en aumento. An Pediatr 2005;63:526-36.
- Nirmalan M, Dark PM, Nightingale P, Harris J. Physical and pharmacological restraint of critically ill patients: clinical facts and ethical considerations. Br J Anesth. 2004;92:789-92 (DOI: 10.1093/bja/ae138).
- Catherine A, Marco MD, Jason Vaughan MD. Emergency Management of agitation in schizophrenia. Am J Emerg Med 2005;23:767-76 (DOI:10.1016/j.ajem.2005.02.050).
- Alcántara Espadafor S, Fernández Castillo A. Urgencias en psicopatología. En: Manual de Urgencias. Vilchez Lara MJ. Barcelona: Masson SA; 1999. p. 365-70.
- Jiménez Bustelo MT, Aragón Domingo J, Nuño Ballesteros A, Loño Capote J, Ochando Perales G. Atención al paciente agitado, violento o psicótico en urgencias: un protocolo pendiente para una patología en aumento. An Pediatr 2005;63:526-36.
- Mayor S. Restraint should be last resort for violent behaviour. BMJ 2005;330:438.
- Torres Hernández P, Fernández-Amela Herrera R, Zabala Fernández ML. Uso de los medios de contención en una unidad de agudos de psiquiatría: descriptivos y condiciones de empleo. An Psiquiatría 2002;18:369-74.
- Cotter VT. Restraint free care in older adults with dementia. Keio J Med 2005;54:80-4.
- Zun LS. A prospective study of the complications rate of use of patient restraint in the emergency department. J Emerg Med 2003;24:119-24.
- López-Ibor Aliño JJ. Psicosis aguda, delirium y agitación psicomotriz. En: Tratado de Emergencias Médicas. Carrasco Jiménez MS, De Paz Cruz JA. Madrid: Aran Ediciones; 2000. p. 1737-42.
- Mallada P, Gascón J, Menchón JM, Otín JM, Vallés V. Agitación psicomotriz. En: Soler PA y Gascón J: RTM II. Recomendaciones Terapéuticas en trastornos mentales. Comité de Consenso de Cataluña en terapéutica de trastornos mentales. Barcelona. Ed. Masson. 1999.
- Bell MD, Rao VJ, Weitli C, Rodríguez RN. Positional asphyxia in adults: 30 cases. Am J Foren Med Pathol 1992;13:101-7.
- Farham FR, Kennedy HG. Acute excited status and sudden death BMJ 1997;315:1107-8.
- Chan TC, Vilke GM, Neuman T, Clausen JL. Restraint position and positional asphyxia. Ann Emergency Med 1997;30:578-85.
- Govern de les Illes Balears. Gestión Sanitaria de Mallorca (GESMA). Protocolo de contención mecánica. Acceso el 8 de septiembre de 2008. Disponible en URL: [http://www.gesma.org/pdf/Enfermeria/Enfermeria\\_en\\_salud\\_mental/Protocolos\\_y\\_Procedimientos/Pro](http://www.gesma.org/pdf/Enfermeria/Enfermeria_en_salud_mental/Protocolos_y_Procedimientos/Pro)
- Shelley Y, Nelson T. Patient choice deciding between psychotropic medication and physical restraint in a emergency. Bulletin of the American Academy Psychiatry and the law 1993;21:321-9.
- Binder RL, McNiel DE. Contemporary practices in managing acutely violent patients in 20 psychiatric emergency rooms. Psychiatric Services 1999;50:1553-4.
- TREC Collaborative Group. Rapid tranquillisation for agitated patients in emergency psychiatric rooms: a randomised trial of midazolam versus haloperidol plus promethazine. BMJ 2003; 327: 708-13 (DOI:10.1136/bmj.327.7417.708)
- Díaz JE. Chemical Restraint. J Emerg Med 2000; 19: 289-91. (DOI: S0736-4679(00)00245-6).
- Citrome L. New treatments for agitation. Psychiatric quarterly 2004;75:197-213.
- Battaglia J, Moss S, Rush J. Haloperidol, loracepan or both for

psychotic agitation? A multicenter, prospective, double-blind, emergency department study. *Am J Emerg Med* 1997;15:335-40.

31 Plan Director de Seguridad Corporativa y de protección del patrimonio del Sescam. Plan Perseo. (Disponible en URL: <http://www.com-cuenca.org/documentos/PLAN%20PERSEO.pdf>)

32 Disponible en URL: [www.constitucion.es](http://www.constitucion.es)

33 Guía de actuaciones en ingresos involuntarios y urgentes. Consellería de Bienestar Social (Subsecretaría de Justicia). Consellería de Sanidad (Dirección General de Atención Especializada). 1998.

34 Ley Orgánica 2/1986, de 13 de Marzo, de Fuerzas y Cuerpos de Seguridad. (art. 11) Disponible en: URL <http://www.boe.es> (BOE n. 63 de 14/3/1986).

## Manejo de urgencias del paciente agitado

**Fernández Gallego V, Murcia Pérez E, Sinisterra Aquilino J, Casal Angulo C, Gómez Estarlich MC**

Los pacientes agitados son una situación clínica a la que con relativa frecuencia se enfrentan los médicos en su práctica clínica. En la primera valoración, además de tomar las oportunas medidas de seguridad, debemos de hacer un diagnóstico de presunción basado en el origen de la agitación (causa orgánica, trastorno mental subyacente o manifestación de una ansiedad extrema). Ello facilitará una posible resolución mediante un abordaje verbal o por el contrario se procederá a la contención mecánica. En caso de que se tome esta última decisión, se debe planificar con antelación y realizarla con al menos 5 personas. Dicha maniobra suele ser el paso previo a la contención con sedación farmacológica con benzodiazepinas, neurolepticos o una pauta combinada de ambos. Es necesario tener en cuenta el riesgo que suponen estos pacientes para su entorno familiar, el personal que lo atiende o incluso su propia vida, por lo que son candidatos a ingresar en unidades de psiquiatría de forma voluntaria o involuntaria. Si optamos por esta última, debe realizarse al amparo de la Ley, así como las medidas de contención y sedación adecuadas. Todas estas maniobras tienen que estar reflejadas con nuestro informe para el psiquiatra de guardia, que es quien realiza el ingreso. [Emergencias 2009;21:121-132]

**Palabras clave:** Agitación. Paciente violento. Emergencia psiquiátrica. Urgencia psiquiátrica. Contención. Internamiento.