

Lower follow-up attendance after physical restraint

Menor vinculación al seguimiento después de contención mecánica

Pol Palau i Puig¹, Meritxell Centeno Cánovas², Joaquim Radua³

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Summary

Use of physical restraint (PR) during the management of agitated patients has been long discouraged. However, only few studies have investigated the potential consequences of being physically restrained on the subsequent follow-up adherence. Using our all year round Psychiatry Emergency Service database we picked up all the patients who had been restrained along 2012 (3 % of the total). The follow-up discontinuation was ~4 times higher in the PR group than in the non-PR group (16.2-17.6 % vs. 4.1-5.4 % during the first six months after the crisis; $p < 0.05$). These results further support the use of non-PR methods in the management of agitation.

Key words: restraint, agitation, emergency, attendance, follow-up.

Resumen

El uso de la contención mecánica (CM) durante el manejo de los pacientes agitados es poco recomendado y mal percibido desde hace ya décadas. Sin embargo, pocos estudios han profundizado en las consecuencias potenciales de ser físicamente contenido sobre la vinculación posterior. Usando la base de datos del servicio de urgencias de psiquiatría, escogimos todos los pacientes que habían sido contenidos a lo largo de 2012 (un 3 % del total). La desvinculación fue unas 4 veces superior en el grupo CM que en el grupo no CM (16,2-17,6 % vs 4,1-5,4 % a lo largo de los 6 meses posteriores a la crisis; $p < 0.05$). Estos resultados respaldan el uso de un manejo de la agitación sin CM.

Palabras clave: contención, agitación, urgencias, asistencia, seguimiento.

¹Psiquiatra Adjunto Unidad de Agudos, Urgencias y Hospital de Día. CASM Benito Menni Granollers-Hospital general de Granollers (Barcelona).

²Coordinadora de Unidad de Agudos y Urgencias de CASM Benito Menni-Hospital General de Granollers (Barcelona). Psiquiatra.

³FIDMAG Research Foundation - CIBERSAM (Barcelona) & Institute of Psychiatry, King's College London, UK

Correspondencia: Dr. Pol Palau i Puig
Francesc Ribas s/n Planta 2
08402 Granollers (Barcelona)
E-mail: ppalau@hospitalbenitomenni.org

Although many articles describe the importance of avoiding physical restraint (PR) in crisis of agitation, only few papers have come out to study the patient perception and the real consequences of being physically restrained after the agitation crisis (Palazzolo *et al.*, 2004). Notable rates of PR have been found in different psychiatric services depending on the centers from 0 to 10% of the emergency patients (Guedj *et al.*, 2004). Loss of contact with Mental Health Outpatient Services (MHS), refusal to medication or traumatic memories about the assistance are just some of the usually mentioned results of restraint (Georgieva *et al.*, 2012). Nevertheless, those features have rarely been studied and ended up in the group of accepted but never proved principles of psychiatry. We found it challenging to set this widely spread concept into the scientific knowledge. With this purpose we assessed the direct relation of restraint on follow-up attendance the months after the crisis.

METHODS

The physicians of our psychiatric emergency team fill a short database after seeing every patient, regardless of the kind of diagnosis or intervention. Using this all year round Psychiatry Emergency Service database we picked up all the patients who had been restraint along 2012 (3 % of the total). We usually note origin, diagnoses, treatments, processes, referrals or admissions. Some patients were kept out of the study because there was not enough personal data or clinical information to complete the form. We also chose non-restrained patients from this database with similar features to complete the study as non-matched controls. A retrospective cohort design was created from this sample. That is we created a group of restrained and a non-restrained group to compare them afterwards.

Different clusters of diagnoses were controlled in order to allow further data analysis: Psychosis, Personality disorder, Substance Use Disorders, Bipolar disorders, Depression, Anxiety Disorders and Adjustment disorders. Besides, other variables of intervention during the stay in the emergency room, sex, age and the patient's town or neighborhood precedence were also taken in consideration (Knutzen *et al.*, 2011)

RESULTS

We obtained a sample of 148 patients of which 82 (55.4 %) were men and 66 (44.6 %) were women. Seventy-four of them had been restrained and 74 did not.

The month after the emergency room stay, 17.6 % of the PR patients did not attend to the MHS, while only 5.4 % of the non PR did not come ($p=0.037$). As you can notice, there is a strong relation between PR and non-attendance outpatient. Nevertheless, the nature of this design does not allow considering relation of cause-consequence.

The 3rd month after the stay 17.6 % of the PR cases and 4.1 % of the non PR cases were missing.

Finally, 16.2 % of the PR and 4.1 % of the non PR patients did not come to our MHS six months after being visited, which means that this association is maintained in time.

The relative risk (RR) obtained for the first month is 3.26, the 3rd month the RR is 4.29 and 3.94 the 6th month; showing the impact of the PR on the risk of discontinuity.

When we used logistic regression checking all the variables controlled as potentially related with discontinuity, substance use disorders ($p=0.026$) and PR ($p=0.017$) were the only items statistically associated with non-attendance the subsequent visits. Even though, there was also a tendency to significance with unknown or out of area patients. In addition, alcohol abuse or dependence was the most common SUD related with PR, but that did not reach to significance.

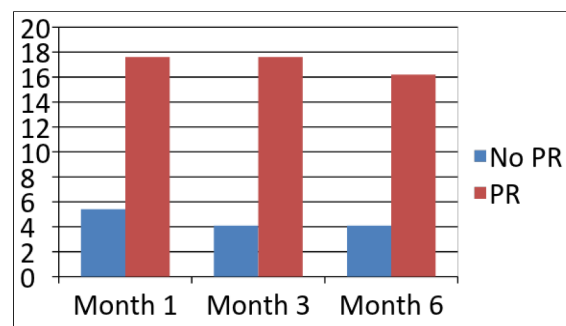


Figura 1

CONCLUSIONS

It is well known that PR becomes in some cases indispensable even though most of the centers are focused on preventing it to happen (Kalisova *et al.*, 2014). On the other hand, it is also known that, maybe too often along psychiatry history, PR has been applied when other procedures like verbal restraint were not run down yet. Attending to our results, PR should be the last step to take before an agitation crisis because of its consequences on subsequent follow-up and obviously on account of ethical and legal issues (Gómez-Durán *et al.*, 2014). Besides, community psychiatry era, where we are nowadays involved, claims even stronger for this kind of measures (Richmond *et al.*, 2013).

We assume several limits in our study. Mainly, the direction of the relation between PR and discontinuity remains unknown. In addition, ethical limitations in this subject complicate a clinical trial design, which would fit better for this purpose.

Even though, more studies are needed to confirm the relation between PR and worse subsequent attendance to the MHS.

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