level of 8.8 mEq/L to levels in the range 6.0 to 7.0 mEq/L. Nevertheless, within 48 h of administration of fludrocortisone 100 μg bid by mouth, plasma potassium was restored to the normal range (3). Further investigations revealed a serum creatinine level of 191 μmol/L (2.16 mg/dL), and a random serum cortisol of 423 nmol/L (15.3 μg/dL) (3). Tacrolimus is another inducer of Type 4 renal tubular acidosis (RTA), and the resulting hyperkalemia may be refractory to intravenous furosemide, oral sodium polystyrene, intravenous sodium carbonate, and glucose-insulin infusion (4). In the report by Sahu et al. (2017) (4), however, serum potassium fell from 6.2 mmol/L (6.2 mEq/L) to the normal range 24 h after the administration of fludrocortisone 0.1 mg/day. With continued use of fludrocortisone, the serum potassium subsequently fell to 4.5 mmol/L (4.5 mEq/L) (4).

Heparin-induced hyperkalemia also has a Type 4 RTA-dependent etiology, and it also resolves after administration of oral fludrocortisone (5). The association of hyponatremia (116 mmol/L; 116 mEq/L) and hyperkalemia (7.2 mmol/L; 7.2 mEq/L) (the latter resistant to intravenous insulin/glucose infusion and to oral cation exchange resins) was attributable to the heparin analogue, pentosane, in a 65-year-old woman with a mistaken provisional diagnosis of adrenal crisis. Both her hyperkalemia and hyponatremia responded to the combination of intravenous hydrocortisone, 100 mg every 6 h, intravenous sodium bicarbonate infusion, and nebulized salbutamol, with the consequence that, 7 days later, her serum sodium had risen to 144 mmol/L (144 mEq/L), and serum potassium had fallen to 3.4 mmol/L (3.4 mEq/L). Her random pretreatment serum cortisol was > 1650 nmol/L (59.81 μg/dL), thereby negating the provisional diagnosis of adrenal crisis (6). Accordingly, there might be a role for the use of high-dose hydrocortisone to exploit the mineralocorticoid action of that agent for the purpose of bringing down the serum potassium level if the patient is too ill to take oral fludrocortisone (7).

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☐ RESPONSE TO LETTER TO THE EDITOR

☐ To the Editor:

Thank you for the interesting comments by Dr. Jolobe in this issue of the Journal (1). Although his review of the use of mineralocorticoid treatment of hyperkalemia has a plausible mechanism of action, the limitation to refractory hyperkalemia excludes this strategy for the overwhelming majority of emergency department (ED) cases. Our study investigated the initial ED treatment of hyperkalemia, and had a primary endpoint defined as the serum potassium level after 4 h of treatment (2). Because the definition of refractory hyperkalemia requires a failure of standard therapy, it is outside the purview of our study to provide insight regarding treatment with mineralocorticoids. Further, we are not aware of a single prospective study using mineralocorticoid therapy for the ED treatment of hyperkalemia. We cannot support the use of mineralocorticoid therapy as an appropriate intervention until there are prospective safety and efficacy data in the ED environment.

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☐ MEDICO-LEGAL ANALYSIS OF TWO RECENT CASES OF BODY PACKING

☐ To the Editor:

We read with interest the two recent reports published in your journal, discussing the unusual case of a body packer concealing both a synthetic cannabinoid and cannabis,

and the radiological features of the "body packer syndrome," respectively (1,2). The two studies include relevant and original information. We aim to contribute to this topic and clarify a few issues.

Firstly, we noticed scarce clarity in the definition and the general information provided regarding body packing, which was confused by the authors with another practice—body pushing. The authors used the same expression "body packing" for both practices; indeed, the two terms are frequently used interchangeably, albeit having different meanings.

"Body packing" is a general term used to indicate the internal transportation of drug packages within the gastrointestinal tract. "Body pushing" refers to the insertion of drugs in anatomical cavities or body orifices, such as the anus, the vagina, and the ears (3,4).

Also, the expression "body packer syndrome" indicates a well-known specific condition that sometimes, as has already happened, may be confused with the practice of body packing. Indeed, the expression "body packer syndrome" includes the presence of both the chemical complications, such as systemic drug absorption and toxicity (e.g., epileptic seizures, neuropathies, rhabdomyolysis, acute renal failure, respiratory depression, cardiac arrest), as well as intoxication due to the packages' leakage or perforation and subsequent peritonitis and the mechanical complications, such as gastrointestinal obstruction due to the packages' amassing. When these two complications occur, we have the so-called "body packer syndrome," which can have devastating consequences, possibly leading to coma and death (4).

Furthermore, we would also like to highlight an aspect that was overlooked by the authors, that is, the type of concealed drugs. Ray et al. described "body packing" only as the internal transportation of illegal drugs, such as heroin, cocaine, marijuana, hashish, and amphetamine, completely overlooking the recent trend of transportation of "legal" substances, such as prescription opioids, psychotropic therapeutic agents (benzodiazepines and oxycodone), and anesthetics, such as lidocaine (1,2,4–6).

Moreover, Ray et al. state that body packers may present to a health care facility: 1) after detention by law enforcement agencies or 2) due to chemical or mechanical complications (2). They ignore a third category of body packers who may present to a health care facility: those individuals who seek medical care on their own or who are brought in by individuals other than the police (7). We should keep in mind that body packers are mostly chosen by drug dealers from among very poor people with the promise of massive financial rewards, and at times these people are lucky enough to change their minds and seek medical attention even without clinical complications.

We would also like to make a further contribution to the valuable paper by Nacca et al. concerning the very unusual case of a body packer concealing a synthetic cannabinoid that, up to now, represents the first case of such a drug transported through body packing (1).

In particular, we want to describe the type of packages encountered by the authors in view of the new recent international classification (8). Indeed, packages removed were composed of a rubber balloon and black electrical tape; these materials, encompassed in the "miscellaneous" and "rubber balloon-based" type packages (described by the old classification as type 1 packages) are of clear extemporary manufacture, indicating nonprofessionals, with drug trafficking organizations (DTOs) behind their production.

The ability to determine the affiliation of body packers and body pushers with major (or not) DTOs is undoubtedly useful for police forces to retrace supply routes for materials and machineries used by DTOs, collect data, and link packaging methods features with specific DTOs. For example, some types of packaging, such as the ones that need machine-based manufacturing (e.g., extreme compression of the drug, vacuum-assisted arranging of layers), necessarily require an organized and expensive processing technique that only major DTOs can provide by buying dedicated machines. This could be useful to uncover whether drug couriers transport illicit substances obtained from major DTOs or, as in the case described by Nacca et al., minor DTOs that can be linked to bigger ones (1).

To conclude, given that the papers presented by Ray et al. and Nacca et al. are of undoubtedly significant value in the field of body packing and body pushing, we feel bound to clarify the above-mentioned issues to highlight some important clinical and medico-legal features related to these cases and to avoid further misunderstandings concerning this complex topic (1,2). In this context, the two articles addressed in this Letter to the Editor are also a valuable reminder that further research in this area is needed, as large gaps remain in our understanding of both clinical and medico-legal issues of body packing and body pushing.

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☐ BEING MINDFUL OF THE CONTEXT

☐ To the Editor:

I want to thank Dr. Cappelletti and colleagues for showing interest in our article and for their insightful comments (1). They have put forward three interesting points, namely: 1) Differentiation of the term body packing from other terms like body pushing; 2) Use of items other than illegal drugs in body packing; 3) Self-presentation by the body packers to a health care facility.

Our case described essentially a body packer, so the term body pushing was not mentioned or described in the article. We have defined body packing as "deliberate storing of contraband." The word contraband is defined by Merriam-Webster as "goods or merchandise whose importation, exportation or possession is forbidden." Even if some substances like opioids may be "legal" otherwise, they may not be legal in circumstances in which they are carried in large numbers or without a proper license or certificate; hence, the need for them to be concealed or "body packed." Finally, the body packers presenting by themselves are indeed reported in the literature, but are likely to be lesser in number as compared with the symptomatic ones or the ones apprehended by a law enforcement agency. In any case, the radiological features and management are essentially the same. They, as compared with the other groups, would likely be more compliant with the treatment prescribed (2).

Although all the points thus mentioned are valid on their own, it would be important to finally revisit the context with respect to our article. Our article was published in the "Visual Diagnosis in Emergency Medicine" section and essentially highlighted (within the stipulated word limit) the radiological images and the extraordinary laparotomic view, pertaining to a case of body packing. The article was not intended to be a one-stop elaborate review—the likes of which are available in the literature and have also been quoted extensively by Capelletti et al in their letter.

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