

# Main causes of family refusal to organ and tissue donation: 10 years of experience in a Latin American centre<sup>☆</sup>

## Principales causas de negativa familiar a la donación de órganos y tejidos: 10 años de experiencia en un centro latinoamericano

Dear Editor,

Organ donation is a voluntary, selfless and altruistic act. There have been advances in the development of procedures to improve clinical, surgical and logistical processes of transplants. Every country has also developed strategies to enhance the process of donation. In Colombia, the Red de Donación y Trasplantes de Órganos y Tejidos (Organ and Tissue Donation and Transplant Network), organisations related to donation processes have been operating since 2004.<sup>1</sup>

Despite these efforts, the refusal to donate organs is currently a major issue, which may reflect myths and beliefs held by society.

Surveys of public opinion show that only 75% favour donation. Of all potential donors (PD) worldwide, 85% took part in a family interview and only 47% gave their consent to donate.<sup>2</sup>

The refusal to donate organs is based on people's myths, beliefs and perceptions. These fears influence families' decisions to refuse to give consent to donate their deceased relatives' organs.<sup>3</sup>

We carried out a retrospective observational study at the Clínica Fundación Valle del Lili (FVL) in Cali, Colombia, aiming to identify the main causes for donor exclusion, the arguments against and the obstacles for organ donation. This information was obtained by reviewing the FVL Transplant Unit's record of effective and ineffective donors from January 2007 to April 2016. As many as 2185 PD were included; 1,024 patients were excluded because they did not progress to brain death (BD).

In patients diagnosed of BD ( $n=1161$ ), 33% of cases were not asked for donation due to clinical contraindication (78.8%), cardiopulmonary arrest (18%) or other causes (3%).

An organ donation was requested in 67% of families of patients with a diagnosis of BD. A total of 23% of families refused and the reason for this refusal was recorded in 64% of cases (Fig. 1).

The percentage refusal of organ donation in the FVL during the study period is lower than the national figures (Fig. 2). This can be explained by the implementation of transplant coordination education programmes for healthcare professionals responsible for approaching families, as well as the

introduction of training on Operational Coordination of Transplants, diploma obtained at the University of Icesi/FVL. These educational strategies have improved the medical treatment process of potential donors, the protocol for approaching families and its organisation.

Gómez et al. report 10 causes of family refusals obtained from a multicentre study in Spain between 1993 and 1994; the most common was the "assumed refusal of the deceased when he was alive" (40.7%), followed by "the family does not want" (24%).<sup>4</sup> In our experience, a "flat refusal" by the family was recorded in 31% of cases, and in 17% the negative was related to "a respect of the patient's wishes" in contrast with the report from Spain.

Other reasons for family refusals such as "wishes of the relative while he/she was alive of not being a donor" and the family dissociation highlight the importance of communicating their wishes to relatives whilst still alive. There was also limited information on organ donation and a poor understanding about the diagnosis of BD, which was a barrier for organ donation.<sup>5</sup>

According to the 2001 report by Cuende et al.,<sup>6</sup> between 1998 and 2000, family refusals were responsible for between 23% and 25% of lost PD with BD, which is similar to our findings. However, in the report which covers the years 1998–2013, family refusal fell to 10.9% of the total interviews.<sup>7</sup> Our rate of refusal is 23%, which suggests that strategies to be more assertive with PD families should be implemented.

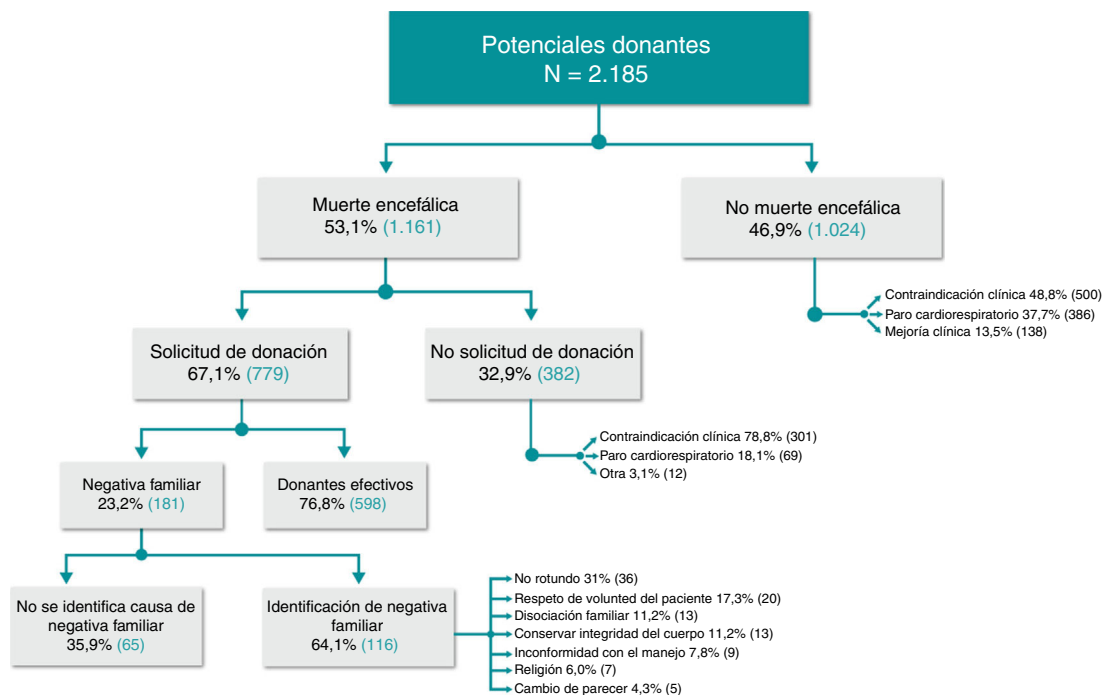
Following the Spanish model of organ and tissue donation,<sup>8</sup> the FVL has established itself as a "donor hospital" since 2014. This is an institutional campaign to promote the education of healthcare professionals and associated people from the academy, making them aware of the importance of implementing an organised and humanised process of donation.

In conclusion, based on our experience, it is important to continue with a protocolised process for approaching the families of potential organ and tissue donors both in transplant hospitals and in PD-generating hospitals. In addition, education of doctors, healthcare professionals and society is key to overcoming the myths, fears and perceptions related to the refusal to donate organs and tissue.

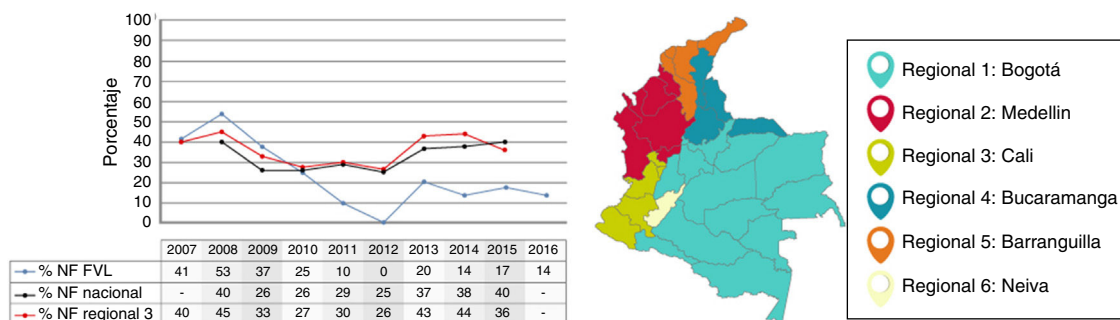
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**Fig. 1 – Potential donors recorded in the period from January 2007 to April 2016 at the Fundación Valle del Lili and reasons for family refusal.**



**Fig. 2 – Regional donation and transplant trends in Colombia. Percentages of family refusals per year at the Fundación Valle del Lili, Region 3 and nationwide.**

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## Acute kidney injury due to granulomatous interstitial nephritis induced by tramadol administration<sup>☆</sup>

### Fracaso renal agudo secundario a nefritis intersticial granulomatosa asociada al tratamiento con tramadol

Dear Editor,

Granulomatous interstitial nephritis (GIN) is a very rare condition present in <1% of kidney biopsies.<sup>1–3</sup> It is primarily associated with drugs (9–45%), sarcoidosis (9–29%), less commonly to mycobacterial or fungal infections and very rarely to inflammatory bowel diseases, microcrystals or paraproteinaemia. The causes of >40% of cases may remain unidentified.<sup>4,5</sup> The drugs which are most commonly involved are analgesics and anti-inflammatories, but we have not found being reported with tramadol, which is why we are presenting this case.

A 71-year-old woman with cervical arthrosis, diverticulitis coli, gonarthrosis with total prosthesis of the left knee and arterial hypertension (treated with telmisartan/hydrochlorothiazide). She attended A&E because of a history of nausea and poor fluid intake for several weeks with no diarrhoea, fever or cutaneous exanthema. The patient had been taking tramadol 200 mg/12 h Retard (prolonged-release) for 40 days for knee pain. In the initial tests, she presented with severe deterioration of kidney function (Table 1) which was attributed to sodium and water depletion, so she was hydrated and hydrochlorothiazide was withdrawn. She was admitted two weeks later as kidney function had not recovered and she presented with proteinuria with no significant albuminuria (Table 1). A kidney biopsy was performed and 3×500-mg bolus of IV methylprednisolone were administered, and she was discharged with oral prednisone (1 mg/kg/day decreasing 10 mg in 10 days) In a subsequent check-up (day +39), a clear improvement of kidney function was seen with

reduced proteinuria. The bone marrow was sampled by fine-needle aspiration, ruling out myeloma, with only 2% of plasma cells being phenotypically mature.

The kidney biopsy showed: 10 glomeruli, 2 with total sclerosis; in six glomeruli there was expansion of the glomerular tuft with vascular congestion and slight hyperplasia of podocytes; capsular adhesions, areas of sclerosis or glomerular collapse was ruled out. The tubule–interstitial compartment showed a marked mixed inflammatory component which occupied 40% of the tissue sample, with predominance of lymphocytes, occasional non-necrotising epithelioid granulomas and incidental presence of giant cells. The Ziehl-Neelsen technique was negative. A degree of tubular atrophy was also seen, as well as degenerative and regenerative changes in tubules in unaffected areas. No tubular protein cylinders were detected. In the immunofluorescence, no immune deposits were seen, showing tubular reaction to both immunoglobulin light chains as well as to IgA and IgM. The histology ultimately suggested GIN, and the existence of a myeloma-related nephropathy was ruled out. The final blood test showed significant recovery of kidney function, although did not achieve the baseline Cr level (Cr 0.78 mg/dl)

GIN has been associated with a wide variety of drugs, including omeprazole, ibuprofen, triamterene, furosemide, fenofibrate, cotrimoxazole, penicillin, ketoprofen and paracetamol. The level of kidney insufficiency is usually mild or moderate, although some cases have required dialysis.<sup>4,6</sup> Accompanying clinical symptoms of fever, exanthema, haematuria or peripheral eosinophilia are rare.<sup>7</sup> The kidney biopsy revealed granulomas with no necrosis, no

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