

mechanical intrusion or invagination rather than by infiltration of the vascular wall.

Most vascular lipomas are asymptomatic and are revealed on incidental CT or magnetic resonance imaging (MRI). Symptomatic tumors may cause thrombosis or venous occlusion.<sup>4</sup>

Although the presence of a lipoma may be confirmed by sonography, the magnitude and depth of the subclavian lesions cannot be appropriately assessed with this technique. Both CT and MRI are useful for the evaluation of subclavian lipomas. Advocates of MRI believe that it provides reliable confirmation of the adipose character of the mass and a more accurate definition of the magnitude of the lesion and its relationship with surrounding structures. We, however, agree with the CT defenders who claim that most of the clinically relevant information on most lesions can be accessed by CT just as clearly as with MRI, but CT is preferable for reasons of cost, availability and ease in obtaining images.

Differential diagnosis includes angiomyolipoma, poorly encapsulated, containing mature adipocytes and small vessels with heterotopic calcifications, cavernous hemangioma, a vascular mass with small serpiginous vessels and phleboliths, cystic hemangioma, mixed-fibrous tumors and lipomatous hemangiofibrocytoma.<sup>5</sup>

Symptomatic lipoma or suspected malignancy are indications for surgical intervention.

Lipomas located in atypical sites are not easy to operate. Careful planning is necessary and the patient must be referred to a cardiothoracic surgeon. Adverse consequences of treatment, such as vascular lesions in a conscious patient or injuries caused by an inexperienced surgeon must be avoided.

## Conflict of Interests

The authors have no conflict of interests to declare.

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## Do Right What Is Right<sup>☆</sup>



## Hacer correctamente lo que es correcto

To the Editor:

Modern medicine offers us a vast range of diagnostic and therapeutic techniques, and the cost-effective use of these is one of the greatest challenges facing the clinician. In some of the more recently introduced and complex clinical areas, such as non-invasive mechanical ventilation (NIV), it is not uncommon to hear opinions voiced that may be not only debatable and confusing, but may even lead to dubious or inappropriate treatment, including the following approaches:

- Discuss local procedures and protocols without providing results from the overall population.
- Conclusively recommend unproven indications for NIV, e.g., in patients with stable chronic obstructive pulmonary disease or obesity hypoventilation syndrome.
- Accept the sum of individual practices as a general criterion for indication.
- Propose the positive benefits seen in a patient subgroup as a criterion for indication, even when the overall results of the study are negative.

- Assume that the results of observational studies represent the best evidence.
- Fail to consider that actions have both organizational and financial consequences.

Variability in clinical practice is a problem that has been recognized for years.<sup>1</sup> It is also true that clinical practice is constructed not only from scientific evidence but also from local circumstances, professional skills and patient values.<sup>2</sup> Decision-making is a complex issue, and it is clear that certain specific problems need to be managed with prescriptions that are not strictly in line with established protocols: this is the realm of compassionate use. A certain degree of flexibility is necessary to stimulate innovation, but it is surprising to see data from the Respiratory Therapy Observatory of Catalonia suggesting that NIV prescription in patients over 65 years of age can vary as much as 40-fold between areas of minimum and maximum prescription.

It is important to remember that professional credibility depends on the consistency of shared values. Sharing real world results, not only those from clinical trials, accepting compassionate treatments for what they are, without converting them into a canon for daily practice, and the critical review of collective clinical practices are key elements in consolidating this credibility. Moreover, credibility is essential if we are to set an example for new generations and contribute to the sustainability of the public health system. This is an area in which scientific societies must be the first to engage in self-criticism and adapt to the demands of our times, in which the practice of medicine should always

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be evidence-based. Prescribing physicians must be aware of their responsibilities when indicating procedures in the absence of such evidence. Professional credibility, transparency and self-regulated discretion will enable us to meet today's challenges and the needs of our patients.

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## Bortezomib-Induced Lung Toxicity<sup>☆</sup>



### Toxicidad pulmonar inducida por bortezomib

To the Editor:

The incidence and severity of lung toxicity reported in clinical trials with bortezomib, a synthetic anticancer drug, was low. However, since marketing, severe cases have come to light.<sup>1,2</sup>

We report the case of a 65-year-old female patient with a diagnosis of multiple myeloma (MM) presenting with acute dyspnea, fever and pulmonary infiltrates after receiving combined PAD chemotherapy (bortezomib, adriamycin and dexamethasone).

## Clinical Case

A 65-year-old woman with history of hypertension, no toxic habits, diagnosed with stage IIIA IgG lambda-type MM. After receiving her third cycle of PAD, she developed a clinical picture of dyspnea, dry cough and fever. Chest X-ray and computed tomography (CT) revealed bilateral pulmonary infiltrates (Fig. 1A and B). Treatment began with piperacillin/tazobactam, amikacin and linezolid. Blood gases showed type 1 respiratory failure with PaO<sub>2</sub> of 49.2 mmHg. Biochemistry and hematology results were normal. Results of microbiological testing, including sputum cultures, blood cultures, specific antigens for atypical pneumonia in urine and serum, were negative. Fiberoptic bronchoscopy revealed a normal bronchial tree with sparse whitish secretions. Results of bronchial aspirate and bronchoalveolar lavage (BAL) cultures were negative. Transbronchial biopsy revealed fragments of pulmonary parenchyma with foci of alveolar desquamation, mild mixed inflammatory infiltrate and bleeding with absence of malignant infiltration, granulomas or fibrosis. No microorganisms were identified.

Drug-induced lung toxicity was suspected, and treatment began with prednisone 1 mg/kg/day in a tapering regimen, until discontinuation 1 month later.

Seven months later, high resolution CT showed improvement of pulmonary infiltrates, persistent patchy ground-glass images with

cobblestone pattern and diffuse, irregular thickening of the peribronchovascular, centrolobular and peripheral septal interstitium (Fig. 2).

A new chemotherapy regimen with lenalidomide + dexamethasone was introduced, with good tolerance and hematological response after 5 cycles.

Spirometry performed 4 months after discharge showed a restrictive pattern (FVC: 58%).

## Discussion

Bortezomib is an anticancer drug initially marketed for second-line, single-agent treatment in progressive MM. It is currently used in combined chemotherapy in association with melfalan, cyclophosphamide and doxorubicin.

The incidence of severe adverse effects in clinical trials was lower than 5%, and severe pulmonary complications were not described before the publication of a series of 4 cases.<sup>1</sup>

The pathophysiological mechanism of bortezomib lung injury is not well established. Several theories have been put forward, for example: bortezomib withdrawal might reactivate NF-κB<sup>1</sup>; it is a direct consequence of tumor lysis syndrome; or it is form of pauci-immune capillaritis.<sup>3</sup>

Various radiological patterns, none of which are specific, have been described, including ground glass opacification, consolidations on air bronchogram, nodules and pleural effusion.

No characteristic histopathological pattern has been identified on either transbronchial lung biopsy or in BAL cytology.

Diagnosis is based on a suggestive clinical picture coinciding with a feasible time frame, after exclusion of other possible triggers, such as infectious disease or pulmonary involvement of the underlying malignant process.

The use of bortezomib has been associated with the development of an obstructive spirometric pattern,<sup>4</sup> but in our patient the opposite was observed.

The therapeutic approach is mainly three-fold: immediate drug withdrawal, supportive measures and the administration of glucocorticoids. Nevertheless, widely ranging responses have been reported.<sup>1,2,5</sup>

Rapid identification of possible "sentinel episodes" of lung injury is essential, so that the clinician can be alerted to the possibility of a potentially fatal disease and the appropriate measures can be implemented.

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