La Prensa Medica Argentina

Case Report

# Acute Cytolytic Hepatitis Probably due to Lercadinipine

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**Abstract**

An 84-y. man was treated by fluindione and verapamil. The latter has been changed for lercanidipine and amiodarone. At day 4, started epigatric ache and asthenia and, at day 14, dark urines. Lercanidipine but not amiodarone, has been stopped at day16. Blood tests disclosed GPTx10. US and virus tests were negative. Liver tests reverted to normal within 2 months. Responsibility of lercanidipine seems probable.

In conclusion: Lercanidipine can induce acute, cytolytic hepatitis.

**Keywords:** Drug induced; Acute; Cytolytic; Hepatitis lecarnidipine

## Case Report

Lecardinipine is an anti-calcic antihypertensive medication, acting through a direct, progressive, relaxation of smooth muscle.

An 84-y. old, retired countryman, devoid of any other antecedent of travels, other treatments, comprising OTC and herbs, non-smoker, not-drinker, without any recent close contact with farm animals, suffered a stroke in 2010 with hypertension. He was treated by fluindione and verapamil.

Verapamil was changed on November 24$^{th}$ 2012 for amiodarone 100 and lercanidipine 20mg o.d. Later on 30th November started epigastric ache with asthenia, without fever, arthralgia or skin lesion or any signs of idiosyncrasia. December, the 8$^{th}$, he started passing dark urines. The 10$^{th,}$ blood test disclosed normal cells except for 0 eosinophil, GPTx10, OGTx8,5, GGTx15 and Al-Px1,5. ESR, CRP, CPK, TSH, creatinine, proaccelerine and urine analysis were normal, albuminemia 36g/l, anti-nuclear antibodies 1/100, Quick time was unchanged. Tests for B, C and E viruses were negative. IgG VHA were present (IgM, delayed antibodies against C and E viruses). Liver was tender, normal sized. Abdominal US was normal. Lercanidipine was stopped on December 10$^{th}$, without stopping amiodarone. Clinical features vanished within a few days. December, the 28$^{th}$, transaminases were normalized and GGTx7. The patient was seen last time in April 2013, enjoying a good health. Blood tests had reverted to normal. Reintroduction has not been performed.

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## Discussion

Lercanidipine is a largely used anti-calcic medication for hypertension. It is commercialized since 1999. Side effects are rare, except for those of all anti-calcic medications. An extensive bibliographic research failed to discover any other case of hepatotoxicity in Pubmed, Hepatox, Livertox, Google, Google scholar and Canadian and British data bases. Poitier's Pharmacology Center and Vidal dictionnary, the french standard, points out some unpublished cases of increased liver enzymes. In the present case, the 3 days period between starting lercadinipine and beginning of symptoms is very evocative [1-3]. The work-up makes another cause improbable. Moreover, the way-of-life of this old, retired farmer is not evocative of uncommon infections. Amiodarone can't be the cause because it has not been stopped. The quick and total regression of signs after stopping lercanidipine favors also its responsibility [1-3]. Mechanism is not clear. Blood tests elicited isolated eosinopenia. He failed to have any sign evocative of idiosyncrasy. Acute hypotension [3], seems improbable because of the progressive hypotensive effect of lercanidipine and of any evidence of cardiac failure. Chronologic criterium can be considered as suggestive as the semeiologic one [1]. Another cause than lercanidipine seems unlikely. Imputability is, therefore, very probable [1,3]. According to Danan's criteria [2], the delay before symptoms can be estimated between 3 days for general signs and 14 days for dark urines: suggestive: +2. Evolution is very suggestive, clinical signs disappearing in less than a week and transaminases reverting to normal at the first control 18 days later: +3. Alcohol: none: 0. Age>55:+1. Associated medications: no other medication with a possible responsibility: 0. Exclusion of viral infection A, B, C or E, autoimmunity, biliary obstruction, hypotension, alcoholism and associated illness: +2. Hepatotoxicity of the drug possible: transitory, reversible elevation of liver enzymes is published in Vidal dictionary: +1 or +2. Reintroduction not done: 0. The total is 9 or 10, corresponding to a responsibility graded as very probable. There is no certain data favoring extrinsic imputability, taking into account the absence of any other published case. However, hepatotoxicity of other anti-calcics like amlodipine is well established (Livertox).

## Conclusion

Lercadinipine can induce acute hepatitis.

## References

1. Bégaud B, Evreux JC, Jouglard J, Lagier G (1985) [Imputation of the unexpected or toxic effects of drugs. Actualization of the method used in France]. Therapie 40: 111-118.
2. Danan G (2003) [Drug-induced acute hepatic injury. What is the value of diagnostic scales?]. Gastroenterol Clin Biol 27: B21-25.
3. Fontana RJ, Seeff LB, Andrade RJ, Björnsson E, Day CP, et al. (2010) Standardization of nomenclature and causality assessment in drug-induced liver injury: summary of a clinical research workshop. Hepatology 52: 730-742.