Reviewer’s report

Title: Role of the external irradiation to the neck region on the intima media thickness of the common carotid artery.

Version: 1 Date: 18 February 2010

Reviewer: Anca Corciu

Reviewer’s report:

The issue presented by Gianicolo ME and colleagues is a topical one. As the number of cancer survivors grows because of advances in therapy, it has become more important to understand the longterm complications of these treatments. This article presents the effects of the external irradiation to the neck on the intima media thickness of common carotid artery disease.

I would like to make several comments or remarks:

1. Please correct the spelling mistakes from the entire paper.
2. Title: maybe it would be more appropriate the term of “effects” instead of the “role”.
3. Results:
   - please express the data as means ± standard deviation.
   - you excluded from the study the patients with carotid plaque; it would be interesting to present these data, considering also the fact that the authors performed a “thorough scan of the extracranial carotid arteries for the eventual presence of carotid plaques, to increase sensitivity for identifying subclinical vascular disease”; how many significant carotid stenoses were found?
   - the study population consisted in patients with cardiovascular risk factors; please add some information about the therapy they are doing, such as antidiabetic therapy, lowering-lipid drugs, antihypertensive drugs…
   - did you see any difference between the carotid intima medio-thickness and the side of the neck where the radiotherapy (RT) was performed? Were more affected the nine patents who received symmetrical RT?

4. Table 1: please add “years” as a measurement unit for age; please swap the order of the minimal and maximal value of age (lines 6 and 7; lines 17 and 18); correct the spelling mistakes (hypercholesterolemia, hypertriglyceridemia)

5. Table 2: please add the legend and define “H”, “NH”, “RT”; please add the measurement unit for RT

6. Please explain why you performed only 31 carotid IMT measurements instead of 38 (2 for each patient) for irradiated patients

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests