Reviewer's report

Title: Cocaine-Induced Renal Infarction: Report of a Case and Review of the Literature

Version: 1 Date: 5 July 2005

Reviewer: Karlene Hewan-Lowe

Reviewer's report:

General
The authors should clearly state that the diagnosis of cocaine induced renal infarction is based on exclusion of other entities that cause renal infarcts, e.g. hypercoagulable states due to factor deficiencies and thromboembolic events, in conjunction with documented cocaine use and appropriate radiographic studies.

The authors should also comment on the specificity of CT scan for the diagnosis of renal infarction. CT scan is not a reliable method for diagnosing renal infarction when the renal infarct is global and there is loss of the viable cortical rim or when the infarct simulates a tumefactive process.

The authors may also wish to be more comprehensive regarding the mechanism of renal infarction due to cocaine. Among the factors listed in the literature are vasoconstriction, endothelial cell damage, platelet oxidation, toxic oxygen radicals and reperfusion injury.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
Although this manuscript is a well described case report, it does not fit the BMC description for publication. If the authors can provide evidence of an educational aspect or change in current therapeutic intervention and practice, then the case report may be acceptable for publication. This type of information should be clearly stated in the abstract and the introduction.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. The references do not conform to BMC Nephrology reference style.
2. The figure numbers and table numbers do not conform to BMC Nephrology style, Arabic numerals.

Style Corrections:
Section: Case presentation
3. Original: A 48 year old African-American male presented to our hospital with a four-day history of severe right flank-pain ...
Correction: A 48 year old African American male presented to our hospital with a four-day history of severe right flank pain ...

4. Original: Other than tachycardia, the rest of the cardiopulmonary exam was normal.
Correction: Tachycardia was noted on cardiac examination.

5. Original: A urinalysis showed 3+ proteinuria, 1 to 3 red blood cells, no white blood cells or casts.
Correction: A urinalysis showed 3+ proteinuria, 1 to 3 red blood cells per high power field and no white blood cells or casts.
6. Original: ... collagen vascular disease (rheumatoid factor and antinuclear antibody); lipid disorders were insignificant.  
Correction: ... collagen vascular disease (rheumatoid factor and antinuclear antibody); lipid disorders were within normal limits.

Section: Discussion  
7. Original: Cocaine (benzoyl methylgonine) is available in two forms: cocaine hydrochloride and alkaloid cocaine ... 
Correction: Cocaine (benzoyl methylgonine) is available in two forms: cocaine hydrochloride and the alkaloid cocaine ...

8. Is this the correct spelling? benzoyl methylgonine (?benzoyl methylecgonine). Please check that the spelling of the chemical names for cocaine and its metabolites are correct.

9. Original: The elimination of cocaine is predominately ... 
Correction: The elimination of cocaine is predominantly ...

10. Original: The pathways for the biotransformation involves ... 
Correction: The pathways for the biotransformation involve ...

11. Original: There's also evidence that cocaine can directly increase calcium influx in vascular smooth muscle [6, 7]; this effect has been documented ... 
Correction: There is also evidence that cocaine can directly increase calcium influx in vascular smooth muscle [6, 7]. This effect has been documented ...

12. Original: Although major toxic effects of cocaine such as myocardial ischemia, cerebral vascular accident, mesenteric ischemia and placenta infarction have been well-documented in the literature .. 
Correction: Although the major toxic effects of cocaine such as myocardial ischemia, cerebrovascular accidents, mesenteric ischemia and placental infarcts have been well-documented in the literature ...

13. Atherothrombotic events ... should this be atheroembolic events?

14. 26 year-old man and 39 year old man ... suggest use of "male" instead of "man".

15. Original: This occurrence may be due to an increased prevalence of cocaine use in the general male population. 
Correction: This occurrence may be due to an increased prevalence of cocaine use in the males.

16. Over use of phrases starting with "Given ..." e.g. "Given this ...", "Given that ...", "Given the ..."

17. The correct first author for reference 4 is "Chiueh CC".

Discretionary Revisions (which the author can choose to ignore)  
1. The authors present a case report of cocaine-induced renal infarction and a literature review. The most current reference is from the year 2001. The following search in Entrez PubMed, using the search terms "cocaine AND renal infarct" produced the following additional articles:

Edmondson DA, Towne JB, Foley DW, Abu-Hajir M, Kochar MS. 
Cocaine-induced renal artery dissection and thrombosis leading to renal infarction. 
PMID: 15696837 [PubMed - indexed for MEDLINE]


2. Since the authors are presenting this manuscript as a case review, the list of additional articles should be considered as possible references.

3. Having an appropriate marker, such as an arrow, that indicates the location of the abnormality would enhance the radiographic images.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.