

## Letter to the Editor

Dear Sir,

The article "Fatal air embolism during female autoerotic practice", Marc B, Chadly A, Durigon M, *Int J Leg Med* (1990) 104:59–61, does not seem to be well documented. If the foreign body (carrot) in the vagina acts like a piston to displace and insufflate a sufficient amount of air, into the veins the same thing would happen during regular intercourse. On the other hand, the season of the fact was not stated: it is well known, that in 18 h (this was the interval between death and discovery of the corpse) putrefactive gas can appear [1]. In the reported case, not all the possible scientific examinations were used: the heart was not examined in situ [2]; the gas not collected, and it was not measured [3]; the chemical analysis was not performed, therefore one can not ascertain, whether the gas was of embolic or putrefactive origin [4, 5, 6]; histological, also, air bubbles in the pulmonary vessels [7, 8, 9, 10] are not described. In forensic practice, the Authors' conclusions would not seem acceptable [11].

### References

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## Reply

Dear Sir,

We were very interested in the observations originating from Pr. G. Pierucci concerning our article "Fatal air embolism during female autoerotic practice" (*Int J. Leg Med* (1990) 104:59–61).

It seems that a foreign body such as the carrot is different from a male erected penis in strength and can be introduced more deeply than a male sexual organ.

Moreover, a few cases have been reported where air embolism has occurred during normal sexual intercourse (Barriot P. (1988) *Eur J Emerg* 2:97–103) and were cited in our article.

Death occurred in winter and the body was found less than three hours after death and then kept 3 hours in a refrigerated room (4°C).

After such a short delay these conditions do not allow the appearance of putrefactive gases or any putrefactive destruction.

No gas was collected because the aspect of the air embolism was typical and diagnosis was macroscopically obvious.

As is recommended, the heart was first examined in situ and then, after clamping of the vessels, removed and dissected in a water basin. There were 150ml of air.

When sudden death related to massive air embolism occurs, there is usually no important passage of gas into the pulmonary circulation.

Moreover, no histological criteria can be retained to ascertain that air is present in pulmonary vessels. Pr. Pierucci certainly mistakes the display of indirect signs caused by air embolism (fibrin, platelets, necrosis) and that of air bubbles which, after accurate histological preparation, could hardly persist!

We would however like to thank Pr. Pierucci for his critical observations stressing the interest of this case report and the difficulties of forensic medicine.

Bernard Marc  
Michel Durigon