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CORRECTION

Correction: Induction of nitric oxide synthase-2 proceeds with the concomitant downregulation of the endogenous caveolin levels (doi:10.1242/jcs.01002)

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This Correction updates and replaces the Expression of Concern (doi:10.1242/jcs.209981) relating to J. Cell Sci. (2004) **117**, 1687-1697.

Journal of Cell Science was made aware of issues with this paper by a reader. Bands were duplicated in the caveolin-1 blot in Fig. 4A and NOS2 loading control blot in Fig. 6A. After discussion with the corresponding author, Ignacio Rodríguez-Crespo, we referred this matter to Universidad Complutense de Madrid (UCM). The UCM investigating committee reviewed replicate experiments to determine if they supported the scientific results and conclusions. They concluded that: "…despite the inadmissible manipulation in the production of the figures, the results and conclusions of the paper seem ultimately supported by the original experiments…".

The editorial policies of Journal of Cell Science state that: "Should an error appear in a published article that affects scientific meaning or author credibility but does not affect the overall results and conclusions of the paper, our policy is to publish a Correction…" and that a Retraction should be published when "…a published paper contain[s] one or more significant errors or inaccuracies that change the overall results and conclusions of the paper…". We follow the guidelines of the Committee on Publication Ethics (COPE), which state: "Retraction should usually be reserved for publications that are so seriously flawed (for whatever reason) that their findings or conclusions should not be relied upon". The standards of figure assembly and data presentation in this paper fall short of good scientific practice. However, given that the investigating committee at UCM decided that the conclusions of the paper were not affected by the errors, the appropriate course of action – according to COPE guidelines – is to publish a Correction, which the journal has made as detailed as possible.

Replicate data for the experiments shown in Fig. 4A and Fig. 6A were available and the correct figure panels are shown below. Note that results are presented in a different order in Fig. 4A compared with the original to avoid splicing of the blots.

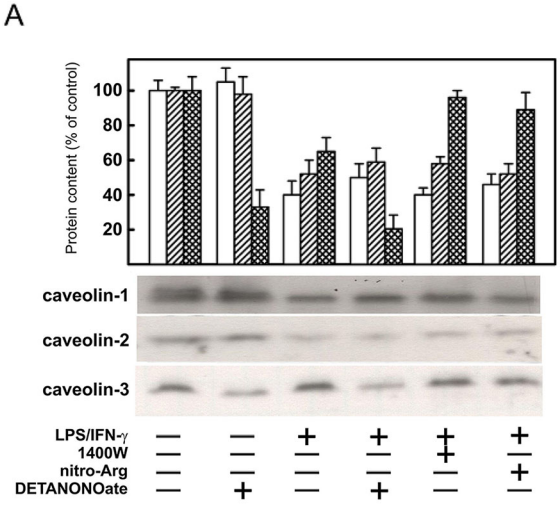

Fig. 4. Treatment of myotubes with ·NO donors induce changes in the levels of cav-3, but not of cav-1 or cav-2. C2C12 myoblasts were differentiated into myotubes and incubated with LPS (2 µg ml-1) plus IFN-γ (100 U ml-1), the ·NO donor DETA-NONOate (100 µM), the ·NO inhibitors 1400W (100 µM) and nitro-Arg (100 µM) for 36 h (cav-1 and cav-2) or 48 h (cav-3) in different combinations. The cells were scraped and the changes in cav-1 (white bars), cav-2 (single-slashed bars) and cav-3 (double-slashed bars) protein levels were determined by immunodetection (A).

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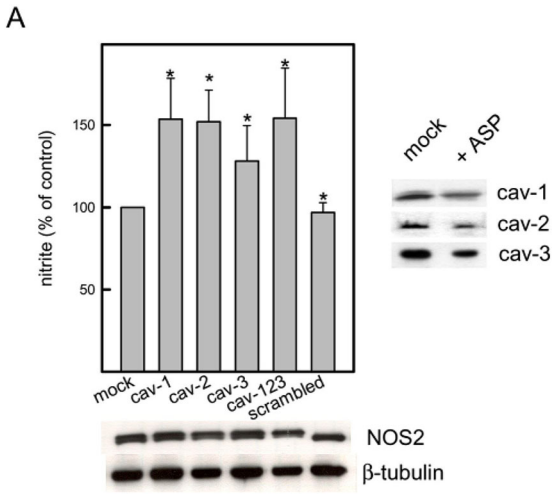

Fig. 6. Synthesis of ·NO in mouse C2C12 myotubes treated with LPS/IFN-γ when incubated with antisense phosphorothioates (ASP) of cav-1, cav-2 and cav-3 (A), and abrogation of caveolin-1 downregulation by protein kinase inhibitors (B). C2C12 myotubes were treated for 8 hours with antisense phosphorothioate oligonucleotides complementary to the first 21 bases of the mRNA encoding cav-1, cav-2 and cav-3. After the treatment, the muscle cells were challenged with LPS/IFN-γ for 36 hours and the amount of ·NO that accumulates was determined with the Griess assay. The antisense oligonucleotides (ASP) were added individually (cav-1, cav-2 and cav-3) or in combination (cav-123). A scrambled oligo corresponding to the cav-1 base sequence was also used as a control. The absence of changes in NOS2 and β-tubulin in each case is confirmed by immunodetection (A, bottom). The results shown are representative of ten individual experiments.

The authors apologise to the journal and readers for these errors.

Journal of Cell Science refers readers to other Corrections related to the UCM investigation:

doi:10.1242/jcs.219634

doi:10.1242/jcs.219675

doi:10.1242/jcs.219683