

ERRATUM

Dynamics of bubbles near a rigid surface subjected to a lithotripter shock wave. Part 2. Reflected shock intensifies non-spherical cavitation collapse – ERRATUM

M. L. CALVISI, J. I. ILORETA AND A. J. SZERI

doi:10.1017/S0022112008003054, published by Cambridge University Press,
10 December 2008

The Press apologises to the authors and readers for errors that were printed in the above paper.

p. 70, figure 2(a), wrong scale on x -axis. The correct figure is:

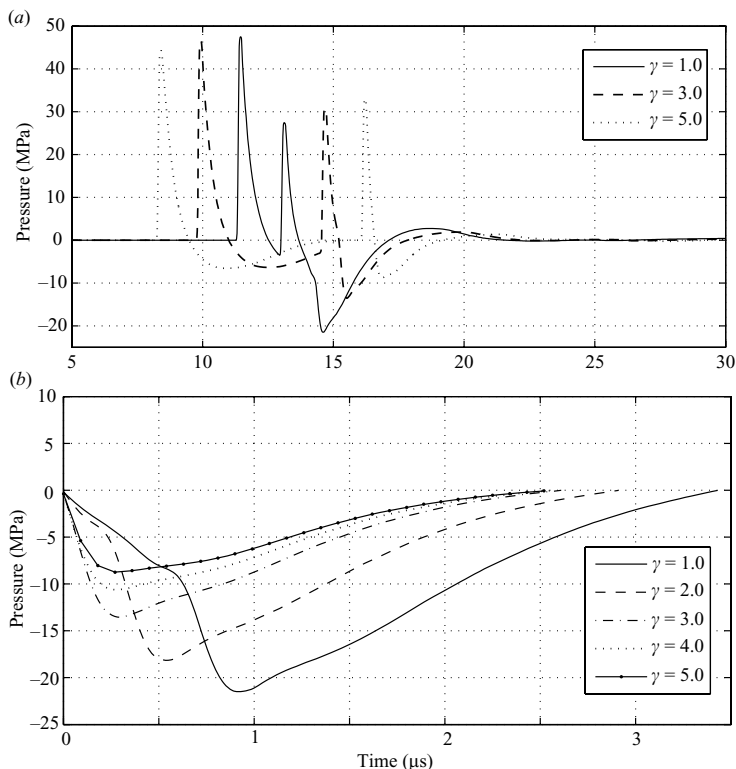


FIGURE 2. LSW pressure *vs.* time profiles along the axis of symmetry of the stone including reflection: (a) plots of pressure *vs.* time at the standoff distances, $\gamma = 1.0, 3.0, 5.0$; (b) plot of only the rarefaction portion of the LSW following the second compressive peak in (a) for $\gamma = 1.0, 2.0, 3.0, 4.0, 5.0$. The curves in (b) are shifted in time so as to start at $t = 0$. In general, the rarefaction depth steadily increases with decreasing γ , owing to constructive interference between the incident and reflected waves. These curves represent some of the pressure *vs.* time profiles used to force the bubble in the simulations of Case 1.

p. 71, line 6 should read ‘(see figure 2*b*) as compared to when it is absent (see figure 4*b*).’

p. 72, figure 4(*a*), wrong scale on *x*-axis. The correct figure is:

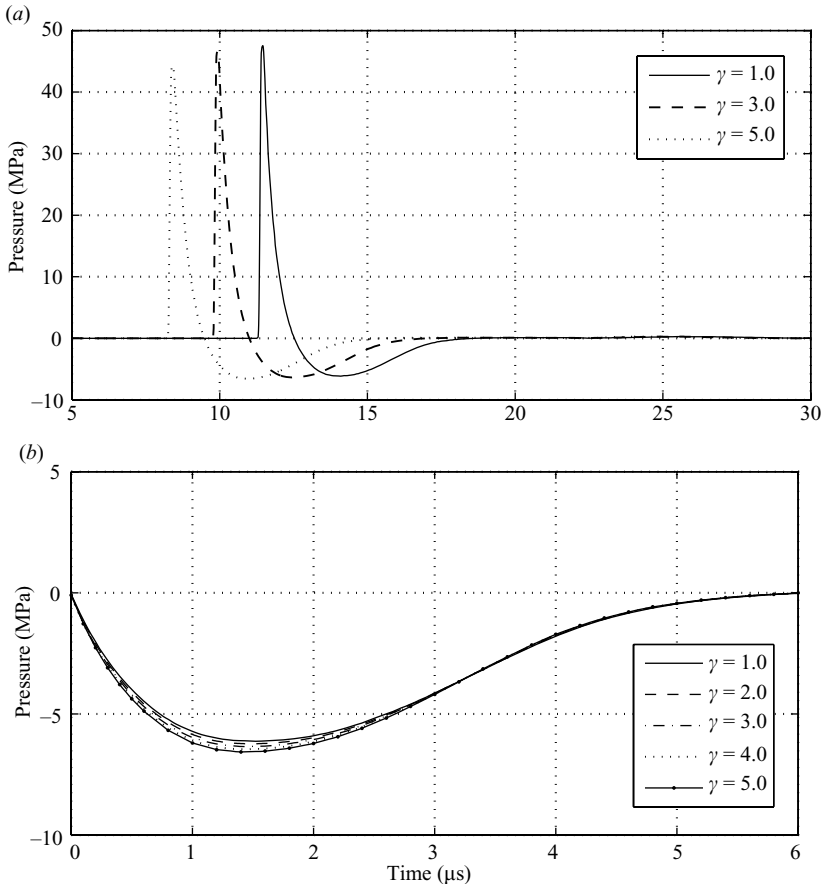


FIGURE 4. LSW pressure *vs.* time profiles along the axis of symmetry of the stone without reflection: (a) plots of pressure *vs.* time at the standoff distances, $\gamma = 1.0, 3.0, 5.0$; (b) plot of only the rarefaction portion following the incident compressive peak in (a) for $\gamma = 1.0, 2.0, 3.0, 4.0, 5.0$. The curves in (b) are shifted in time so as to start at $t = 0$. For the curves shown, the rarefaction depth increases slightly with increasing γ , owing to focusing of the LSW, and is greatest for $\gamma = 5.0$. These curves represent some of the pressure *vs.* time profiles used to force the bubble in the simulations of Case 3.

p. 76, line 7 should read ‘The work input of the STP (the leading portion of ...’

p. 81, line 19 should read ‘the bubble standoff is increased, ...’

p. 89, figure 16(c), values on y-axis incorrectly aligned. The correct figure is:

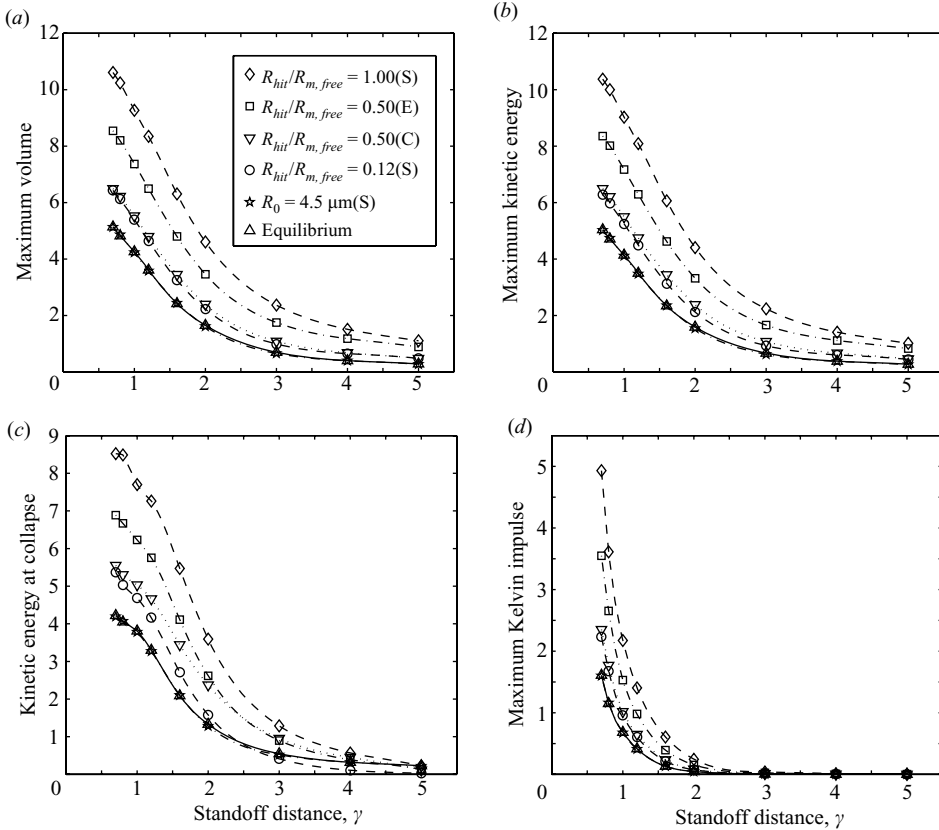


FIGURE 16. Plots of various dimensionless physical quantities comparing results from the default Case 1 at equilibrium (“Equilibrium”) to those not initially at equilibrium. The STP is used for the forcing input in all cases. For the first four non-equilibrium cases, the initial radius is $25 \mu\text{m}$, the overpressure factor is 100, and the bubble is contacted with the STP at various stages during its oscillation cycle, as depicted in figure 15. Results from a fifth case (“ $R_0 = 4.5 \mu\text{m}$ (S)”) are shown for a bubble that is initially stationary with $R_0 = 4.5 \mu\text{m}$ and an initial overpressure factor of 170. The results for this case match almost exactly those of the Equilibrium case. The plots show the following physical quantities: *a*) maximum volume vs. γ ; *b*) maximum kinetic energy vs. γ ; *c*) kinetic energy at collapse vs. γ ; and *d*) maximum Kelvin impulse vs. γ .

p. 92, line 26 should read ‘... regarding inclusion of the ITW...’

REFERENCE

CALVISI, M. L., ILORETA, J. I. & SZERI, A. J. 2008 Dynamics of bubbles near a rigid surface subjected to a lithotripter shock wave. Part 2. Reflected shock intensifies non-spherical cavitation collapse. *J. Fluid Mech.* **616**, 63–97.