Erratum

Erratum: Meson, baryon, and glueball masses in the MIT bag model [Phys. Rev. D 27, 1556 (1983)]

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The masses quoted for 0^{-+} and 2^{-+} (TE)(TM) glueballs are in error. The masses were given in Table IV and Fig. 6. The relevant part of Table IV should read

		$M_{\rm bag}$ (GeV)	R_0 (GeV ⁻¹)	$\alpha_s(R_0)$
(TE)(TM)	0-+	1.26	3.07	0.92
	2-+	2.27	3.32	1.00

The states should also be moved upwards in Fig. 6; the spread in values from n=1 to n=3 stays about the same.

(The error may be traced through coefficient c for (TE)(TM) in Table I—it should read +0.173—to the evaluation of $\tilde{c}_{MM}^{\text{Oul}}$ as given in Eq. (E24) of our companion paper [Phys. Rev. D $\underline{27}$, 2167 (1983)]. The error was corrected before that paper was published. Also coefficient a for qq, $q\overline{q}$ in Table I should read 0.708 or 4×0.177 .)

The corrected results affect some of our comments in Sec. IV B and Ref. 26 about identifying the 0^{-+} (TE)(TM) glueball with the $\iota(1440)$. Our mass predictions are still below 1440 MeV, but now not by so much as to vitiate the hypothesis that the ι is a glueball. To get a 0^{-+} state at 1440 MeV by changing e_{TM} alone would require $e_{TM} \cong -0.15 e_{TE}$. The exercise suggested in Ref. 26, using quadratic mass mixing, moves the $q\bar{q}$ states (" η and η ") to 0.39 and 0.86 GeV and gives an octet-singlet mixing angle of -18° , where the experimental values for the latter is $(-10 \pm 1)^{\circ}$.