Basal ganglia symmetric and asymmetric calcifications can reflect mitochondrial disorders

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We have read with interest the retrospective study by Jiménez-Ruiz et al. on the causes of symmetric calcification of the basal ganglia (SCBG) in a cohort of patients who underwent cranial computed axial tomography.\(^1\)

The title indicates that calcifications were symmetrical;\(^1\) however, Figures 1, 2 and 3 show asymmetrical calcifications. What was the accepted degree of asymmetry to include them?

The authors indicate that the review period was 4 years; however, in the Methods section it is described to have encompassed from 2012 to 2016 (5 years). What was the actual study period?

The authors mention that SCBG can be found in 1% of cranial computed axial tomography scans.\(^1\) Given that 7 patients had SCBG, this implies that approximately 700 tomographies should have been performed during the study period. Was that the correct figure or did the authors find any other SCBG percentage, as previously it is mentioned?\(^2\)

Of the 7 patients, one had hypoparathyroidism and the other pseudohypoparathyroidism.\(^3\) Since both these conditions can have MELAS syndrome phenotypic traits,\(^3\) it was essential for mitochondrial disease to be investigated in patients 2 and 3. Both these patients, did they have other phenotypic traits suggesting mitochondrial disease?

Table 3 indicates that SCBG can occur in mitochondrial conditions such as MERRF;\(^4\) however, SCBG is infrequent in MERRF.\(^4\)

One deficiency of the study is that the MELAS cases were not genetically confirmed, even when clarifying the genetic basis of this syndrome is known to be essential owing to its heterogeneity.\(^5\)

References