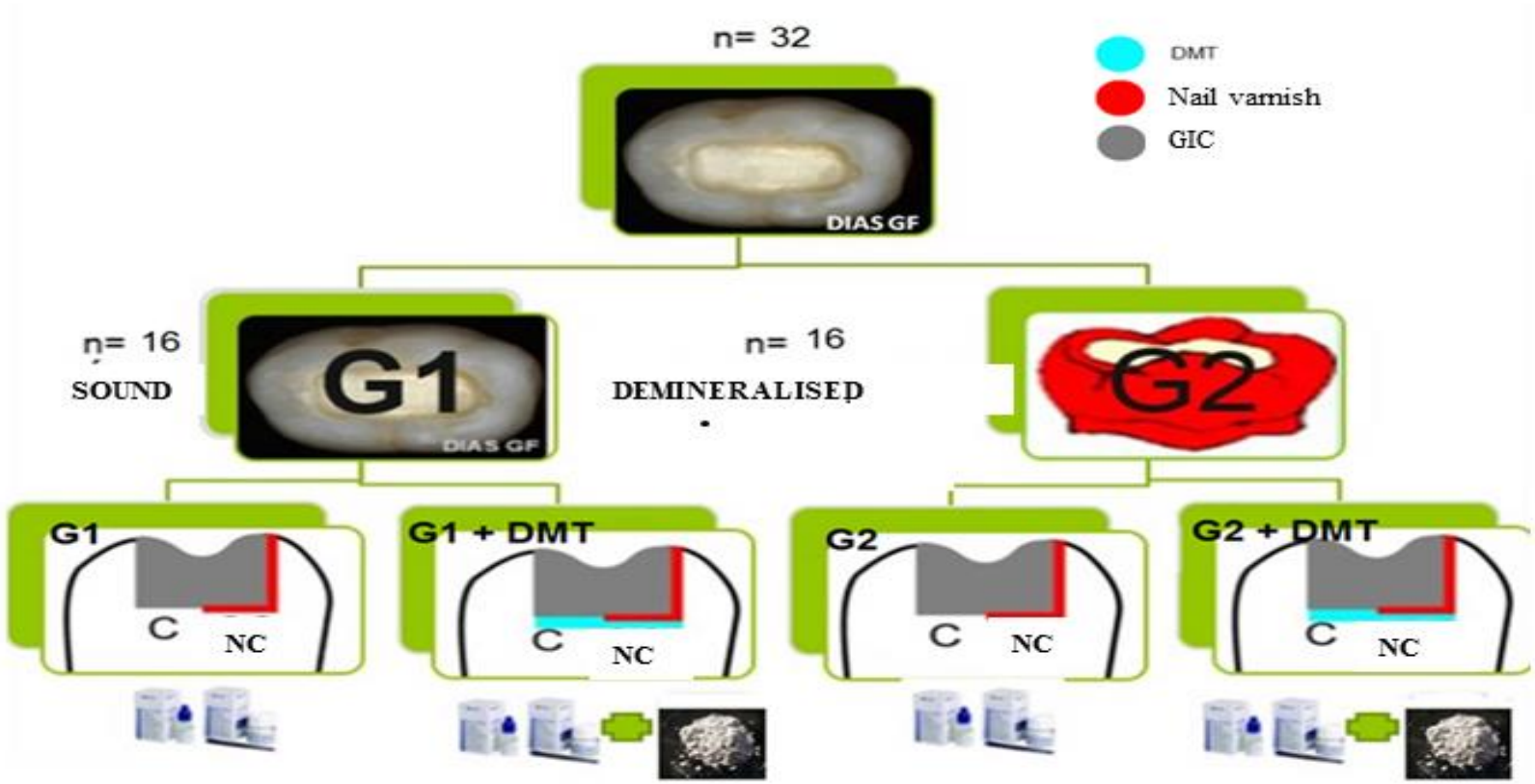

FIGURE 1– Teeth in two dentin conditions: sound/ demineralised (G1,G2) and with topical application of DMT powder before restoration (G1 DMT, G2 DMT). Red nail varnish layer has been applied to avoid direct contact of GIC with the half of the dentin - control area (NC) and test area (C).

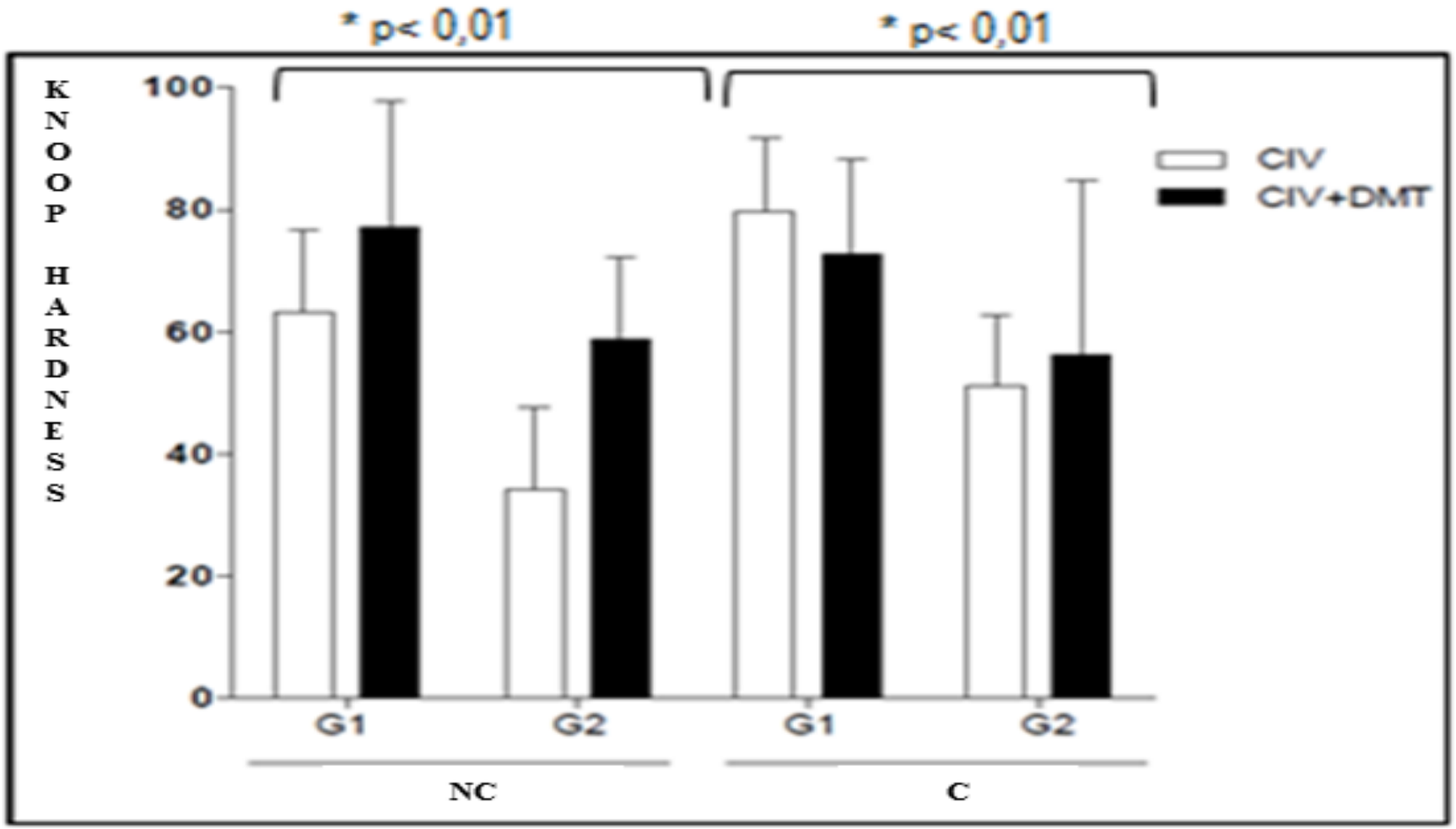

FIGURE 2 - Mean and standard deviation of Knoop hardness values. (*) Significant differences for the factor dentin in areas without contact (control area) and contact (test area). Dentin factor was no significant difference in the area NC ($p < 0.01$) and no significant difference in the C ($p = 0.391$). Interaction (factor dentin and treatment) there was no significant difference according to the NC ($p = 0.232$) and the C ($p = 0.391$). Anova 2 criteria.

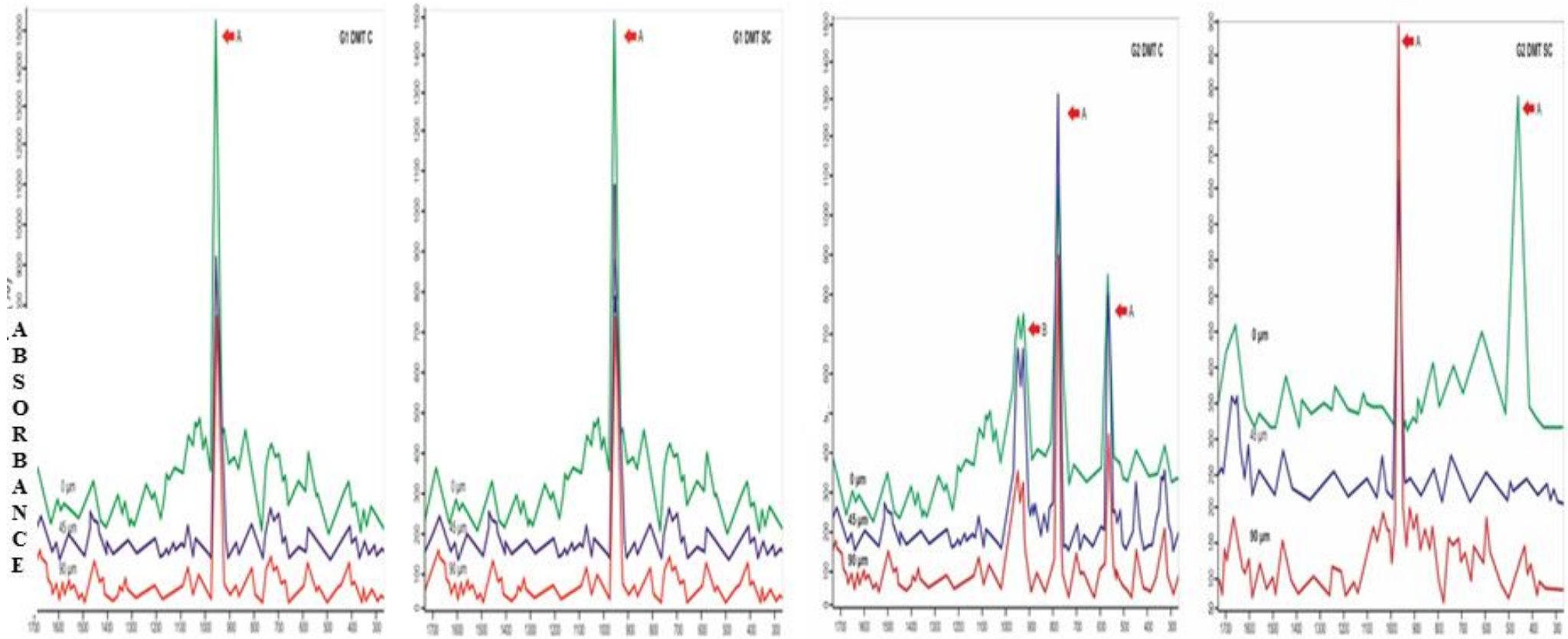

FIGURE 3- Spectra obtained from the analysis of the dentin composition by spectroscopy micro-Raman G1 DMT group. G1 DMT C (sound dentin treated with GIC + DMT), G1 DMT SC (sound dentin treated with DMT, without contact with GIC). Higher absorbance found in the cavity base in both groups (C, SC) The arrow indicates (A): Phosphate.

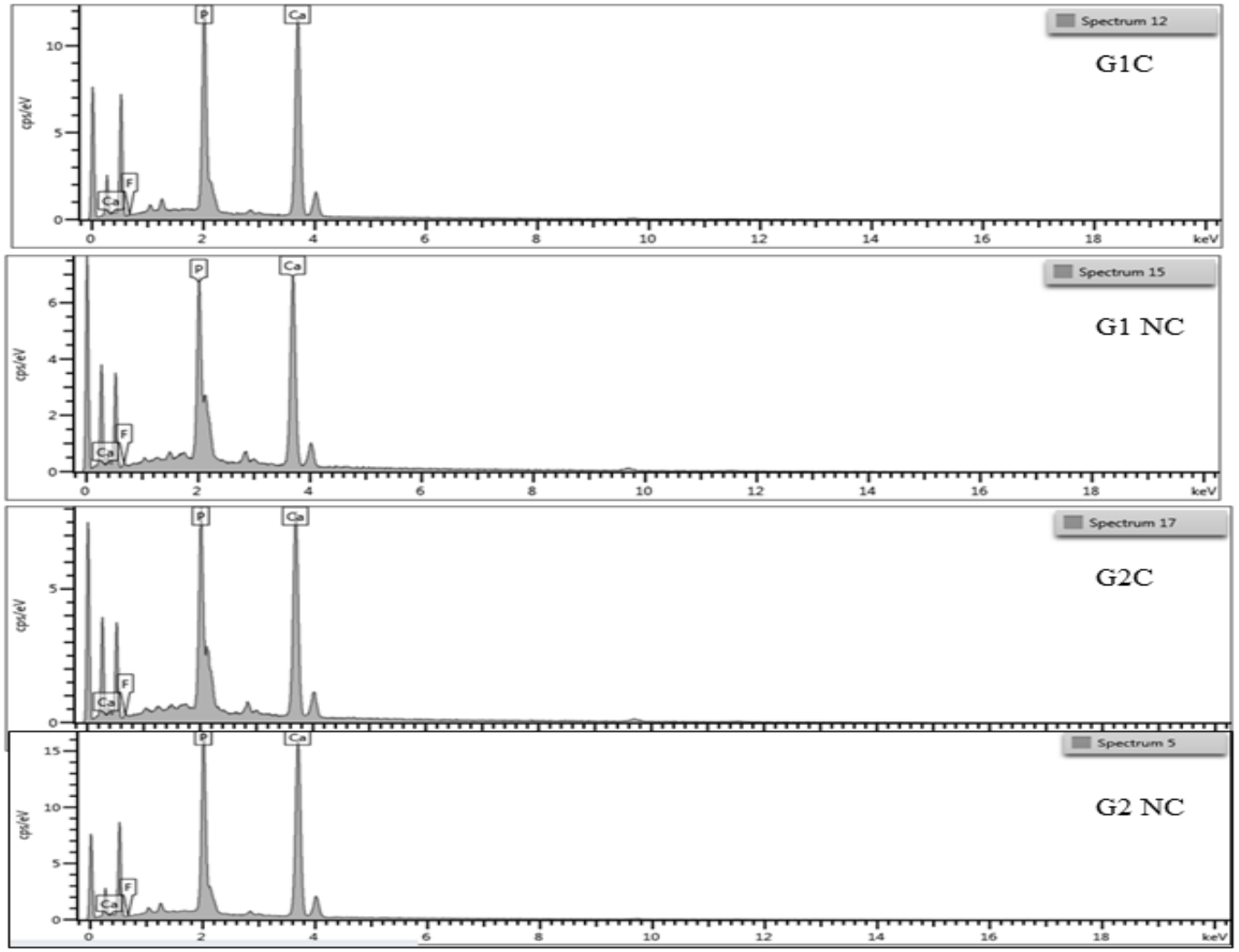

Figure 4: Representative scanning eletron micrographs of cavity floor from FEG and EDS. (G1C) Primary baseline; (G1SC) Primary teeth no contact baseline; (G2C) Primary teeth demineralised after treatmente with DMT and GIC; (G2SC) Primary teeth demineralised after wear with GIC