

higher than those in normal individuals suggests that LMW-AGEs may represent a model of the glycosylation of tissue proteins and may also reflect the efficacy of diabetic management. Of significance, HbA_{1c} values correlated well with LMW-AGEs.

The reference range of LMW-AGEs in the elderly group being higher than that in the young group deserves further discussion. Because test results from any measurement should be compared with a reference interval for assessment, interpretation of test results is a comparative decision-making process. For this to occur, reference values are needed for the purpose of making a diagnosis. Establishing the reference range for LMW-AGEs is especially important in geriatric medicine. Tissue-derived degradation products of AGEs-modified proteins take a few months to form. Long-lived proteins are particularly susceptible to the accumulation of non-enzymatic modification. AGEs formation in tissues is not only proportional to ambient glucose concentration but also to the longevity of the tissue proteins. In line with this assumption, the circulation LMW-AGEs are higher in the elderly than in the young group. These data suggest that LMW-AGEs may also serve as an indicator of the potential pathogenicity in diseases associated with elderly people.

In conclusion, AGEs-specific antiserum was raised to develop a standardized competitive ELISA method. The method was used to investigate the reference ranges of AGEs in 2 different age groups of non-diabetics. The circulation AGEs levels were found to be higher in the elderly than the young group. The circulatory AGEs levels in the diabetic patients being significantly higher than in the normal control group correlates well with HbA_{1c} values regardless of age. Standardized immunochemical analyses of circulating LMW-AGEs with specific anti-AGE antibodies should prove useful as a circulation marker reflecting the severity of the diabetic sequel.

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