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JOURNAL ARTICLE

Coenzyme Q10 concentrations in normal and pathological human seminal fluid

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Coenzyme Q10 (CoQ10) levels were assayed in total seminal fluid or both in seminal fluid and seminal plasma in 77 subjects with normal or pathological findings at standard semen analysis. CoQ10 levels showed a significant correlation with sperm count and with sperm motility. An interesting exception was constituted by patients with varicocele, in whom the correlation with sperm concentration was preserved, whereas the correlation with sperm motility was lacking. Moreover, they showed an increased ratio of plasma CoQ to total seminal CoQ10 in comparison with the other subjects. These data suggest a pathophysiological meaning of CoQ10 in human seminal fluid and a possible molecular defect in varicocele patients. CoQ10 measurement could represent an important examination in infertile patients; moreover, from these results a rationale might arise for a possible treatment with exogenous CoQ10 in dyspermic patients.