



| | At employment | After therapy | Exposed people | Unexposed people |
|-----------------------|---------------|---------------|----------------|------------------|
| ■ Chromatid breaks | 22 | 5 | 3,8 | 0,26 |
| ■ Acentric fragments | 2 | 5 | 11,8 | 4,2 |
| □ Dicentric fragments | 4 | 65 | 4,8 | 0,52 |

Fig. 2. The frequency of structural chromosome aberrations, expressed per cell, found at the time of the patient's employment and after radio-chemotherapy for HD, in comparison with chromosomal aberrations found in lymphocytes of medical staff exposed to similar ionizing conditions (exposed people, N = 25), and people working in normal working conditions (unexposed people, N = 30).

Table 1. Chromosomal aberrations found in peripheral blood lymphocytes before and after therapy

| Time of analysis | Gaps | Chromosome breaks | Minutes fragments | Chromatid | Acentic metaphases | Dicentric | All/200 | % all |
|-------------------------------|------|-------------------|-------------------|-----------|--------------------|-----------|---------|-------|
| Before employment | 2.8 | 0.8 | 0.8 | 4.4 | 0.4 | 0.8 | 9.2 | 4.6 |
| After radio- and chemotherapy | 2.0 | | 26.0 | 1.0 | 1.0 | 13.0 | 43.0 | 21.5 |

instability and, looking behind, it would certainly have been better that she had not started to work in potentially dangerous conditions, in spite of all good measures of protection. Without any intention to link the subsequent events to only one very hypothetical contributor, we would like to conclude that we presented this case report in an attempt to emphasize the performance of regular chromosome aberration analysis. Besides the initial warning, the test made after radio-chemotherapy in this case also points to a very high

incidence of dicentric fragments after radio-chemotherapy used to cure the HD (Table 1 and Fig. 2, 1 and 2). Although these aberrations are unstable, in the patient's lymphocytes they were found one year after chemotherapy and 6 months after radiotherapy. Since most of the reported evidence points to shorter times of their disappearance (Spruill et al. 2000; Tawn et al. 2000), the greater risk for appearance of late complications of HD in this patient must also be taken into account.

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