

学位論文の要旨

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主論文の題名			
Elevated CD133, but not VEGF or EGFR, as a predictive marker of distant recurrence after preoperative chemoradiotherapy in rectal cancer			
主論文の要旨			
<p>BACKGROUND:CD133 has been postulated to be a colon cancer stem cell (CSCs) marker. Recent investigations suggest that CSCs might contribute to cancer recurrence and resistance to conventional therapies. This study aimed to evaluate the role of CD133 in residual cancer cells after chemoradiotherapy(CRT) for rectal cancer.</p> <p>METHODS:Total RNAs of rectal cancer cells before (n=30) and after (n=40) CRT were isolated. Intratumoral CD133, vascular endothelial growth factor(VEGF), and epidermal growth factor receptor (EGFR) levels were measured using real-time reverse transcription polymerase chain reaction. Immunohistochemical staining of CD133 after CRT was also investigated.</p> <p>RESULTS: The levels of CD133 were found to have increased in post-CRT specimens (p=0.0184), while VEGF and EGFR levels decreased during CRT (p<0.0001 and p=0.0002, respectively). Patients who developed distant recurrence had a higher post-CRT CD133 compared with those patients without recurrence (p=0.0136). Elevated post-CRT CD133 was associated with poor disease-free survival (p=0.0168). Immunohistochemical staining of the cytoplasmic and apical/endoluminal membranous CD133 was observed in residual cancer cells after CRT.</p> <p>CONCLUSION:CD133 expression in residual cancer cells after CRT may indicate a treatment resistant phenotype in putative CSCs. Elevated CD133 on FFPE specimens may be a predictive marker of distant recurrence and poor survival after preoperative CRT in rectal cancer.</p>			

(注) 2, 000字以内にまとめて記入すること。

