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Impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells

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Abstract

In the current paper, impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells are studied. After diagnosis the primary treatment for solid tumors is often surgery. The objective of surgical treatment is resection of all malignant tissue with adequate resection margins while preserving important healthy structures. Achieving adequate surgical margins is important for disease control and survival. Residual tumor after surgery is associated with poor survival and the need for additional surgery, adjuvant chemotherapy, radiation therapy, or impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells. A number of studies have shown that the 5–year survival decreases significantly when impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells. Intraoperative guidance tools can help to achieve adequate surgery. However, there are no widely used intraoperative guidance tools available yet. Current surgical resection techniques are based on subjective methods, such as palpation and visual inspection, to judge the border between normal and cancerous tissue.

Introduction

Impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells has also been implemented to guide oncological surgery. Several studies have demonstrated that this technique can be used for surgical guidance. For example, in brain gum cancer surgery, an intraoperative impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells that measures directly brain tissue in the patient, has proven to distinguish dense and low–density gum cancer infiltration from benign brain tissue with a sensitivity of 93% and a specificity of 91% 52. In another study, a real–time impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells was used during gum cancer surgery for assessment of freshly resected specimens. This study has demonstrated that impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells could discriminate cancerous tissue from normal gum cancer tissue with a sensitivity of 83% and a specificity of 93% [1-10].

Results and discussion

The scope of this article is to provide an analysis of the translation of R&D results, obtained in oncological applications of impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells, into clinical practice. We discuss problems that still need to be solved in order to bring the technique successfully to the end–users in the hospital setting. The importance of defining the clinical needs and requirements, for different applications, is also explored in this review. We have limited our review to spontaneous impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells

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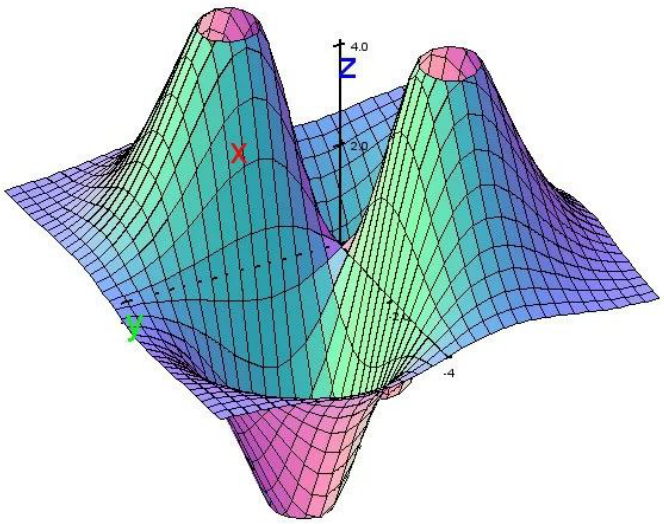

Figure 1. Impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells

applications on ex vivo and/or in vivo human tissue samples. We refer to the other recent review articles for biomedical applications of non–linear impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells, such as coherent and impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells (Figure 1).

Conclusion

All the eligible impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells application studies were included, regardless the gum cancer type addressed. The included studies were divided considering two major oncological applications of impact of DNA/RNA self–alignment in a strong magnetic field on the interpretation of indirect spin–spin interactions using NMR line shape analysis of a multi–state DNA/RNA ligand binding mechanism in gum cancer cells.

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