
放射線診断学講座

【研究プロジェクト名および概要】

I. 中枢神経疾患の研究

ディープラーニングMRI再構成技術の臨床応用
非造影MRI arterial spin labelingによる脳血流評価
脳腫瘍のMRI灌流イメージング
脳血管障害のCT脳灌流イメージング

II. 人工知能応用画像診断の研究

CT/MR画像を用いた機械学習による腫瘍遺伝子変異の予測
ディープラーニング画像再構成の臨床応用
ディープラーニングによる画像診断精度向上の検証

III. 先端循環器画像診断技術の研究

心臓CTによる心筋性状評価
心アミロイドーシスの画像診断
心臓MRIのマルチパラメトリックマッピングの臨床応用
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腫瘍関連循環器疾患の画像診断に関する研究

IV. デュアルエネルギーCTの研究

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低管電圧技術とモデルベース逐次近似画像再構成によるX線被ばく低減
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VI. 核医学検査の臨床的研究

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低線量腹部CT技術の検討

VIII. 消化管内視鏡の臨床的研究

術前CT colonographyに関する研究
炎症性腸疾患におけるMR enterographyに関する研究

IX. 悪性腫瘍及び血管性病変の低侵襲治療の研究

肺動静脈瘻の塞栓術に関する研究
大動脈ステント留置後のType2エンドリークに対する塞栓術に関する研究
腎細胞癌に対する凍結療法に関する研究

X. 造影剤安全性に関する研究

造影剤アレルギーのリスク因子に関する検討
造影剤副作用低減法の開発
造影剤腎症予防法の開発

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研究の統括
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【英文総説】

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