artery (RCA), left anterior descending artery (LAD), and left circumflex (LCX) segments. Those patients who were diagnosed with myocardial ischemia then went on to undertake CAG, the results of which were categorised as a match or a mismatch.

Results: Matched findings at SPECT, CTCA, and hybrid imaging were found in vessels of 75%, 67%, and 92%, respectively. SPECT showed sensitivity of 70%, specificity of 77%, and accuracy of 73% averaged over all of the segments. Likewise, CTCA exhibited sensitivity of 83%, specificity of 79%, and accuracy of 81%. However, hybrid imaging demonstrated greater diagnostic performance (92% sensitivity, 86% specificity, and 89% accuracy). Moreover, the hybrid approach allowed for diagnosis of 22 vessels too difficult to assess correctly CTCA alone.

Conclusion: The hybrid approach gives physicians the ability to overcome false positives or accurately diagnose images that would have been too difficult with either single modality. These factors enable physicians to make better judgements about the necessity for the more invasive CAG procedure.

4-II-2.

Difference in subcellular localizations of estrogen receptor α affects proliferation and migration of Ishikawa cells

(大学院博士課程4年形態系人体構造学分野)

O Mierxiati Saimi

(人体構造学分野)

Li Zhong-Lian、Miyaso Hidenobu、Nagahori Kenta Kawata Shinichi、Omotehara Takuya、Ogawa Yuki Itoh Masahiro

(生化学分野)

Moriya Shota, Hino Hirotsugu, Miyazawa Keisuke

The effects of estrogen (E2) on cells are mediated by the estrogen receptor α $(ER\alpha)$ which is localized at the peri-membrane, cytoplasm, and the nucleus of cells. $ER\alpha$ which is different in sub-cellular localizations results in dynamically integrated and finely tuned E2 signaling pathways that orchestrate cellular survival, differentiation, proliferation, and migration. The

deregulation of E2-ERa pathways plays a critical role in the initiation and progression of target tissue malignancies. However, the definite function of ERα in relation to its cellular localizations remains to be clarified. The purpose of the present study was to investigate the effects of difference in subcellular localization of ERa on cell proliferation and migration. Except in cells transfected with wild-type human $ER\alpha$ (wild-type $ER\alpha$), relatively higher proliferative capacity and wound healing ability were observed in cells with membraneous, especially with cytoplasmic ERα. It is interesting to note that an amino acid substitution in ERα-F445A (cytonuclear ERα), resulted in relatively lower proliferative capacity and wound healing ability, which is contrary to basic functions of ERa. The present results indicate that the cytoplasmic ERa is more important for cell proliferation and migration. It is important to clarify which signal pathway down-stream of ERa plays a crucial role in these effects.

4-II-3.

Second-Generation Cryoballoon Ablation for Atrial Fibrillation —A Detailed Analysis of the Impact of Left Atrial Volume Index on Clinical Outcome

(循環器内科)

○寶田 顕

(Heart Rhythm Management Centre, Postgraduate Program in Cardiac Electrophysiology and Pacing, Universitair Ziekenhuis Brussel-Vrije Universiteit Brussel)

Ströker Erwin, de Asmundis Carlo, Sieira Juan

Coutiño Hugo-Enrique、Salghetti Francesca Choudhury Rajin、Brugada Pedro Chierchia Gian-Battista (Villa Maria Cecilia Hospital, Gruppo Villa Maria) Iacopino Saverio

※抄録の掲載を辞退する。