海外短期研修概要

海外短期研修概要

【出 張 期 間】2002年4月13日〜4月20日

【学　会　名】第26回　国際助産婦連盟 ICM ウィーン大会，オーストリア

【発 表 者 名】大関信子、新道幸恵、益田早苗、玉熊和子、高橋佳子

【発表論文名】Informed consent during labour and clients' expectations and satisfaction : comparing the practice of midwives and doctors

【趣　　　旨】The doctor-patient relationship in Japan has been one of paternalism, yet the concepts of informed consent and clients' rights have gradually been gaining ground in Japanese society since the early 1980s. This research compared the extent to which midwives and doctors sought informed consent and protected clients' rights during labour. An original anonymous questionnaire was given to mothers and collected by post. Clients' expectations of doctors and midwives were more less the same. However, clients felt that midwives practiced informed consent and protected clients' rights more readily than doctors(P<0.05). Client satisfaction was much higher with midwives than with doctors(P<0.01). 62.7% of clients felt that the care they received affected their mental state after delivery.

【出 張 期 間】2002年8月6日〜16日

【出　張　先】ドイツ，イエナ市，フリードリッヒ・シラー大学

【学　会　名】第13回生体磁気国際会議　Biomag 2002

【発　表　者】① Isamu OZAKI, Chun Yu JIN[1], Yasumi SUZAKI[2], Masayuki BABA[1], Muneo MATSUNAGA[1], Isao HASHIMOTO[3],

所属：[1] 弘前大学医学部脳研神経統御部門

[2] 青森県立保健大学社会福祉学科

[3] 金沢工業大学人間情報システム研究所

【発表論文名】①：Dynamic anterolateral movement of auditory N100m dipoles reflects activation of isofrequency bands through horizontal fibers

【要　　　旨】① In the mammals including primates, neurons sensitive to the same frequency are lined up to form "isofrequency bands" in the auditory cortex. Furthermore, excitation in rat auditory cortex spreads along the isofrequency bands. In human auditory evoked magnetic fields (AEFs), however, no previous studies have focused on traveling of the N100m sources. To analyze the temporal changes in localization of an equivalent current dipole (ECD) for the auditory N100m, we recorded AEFs to 400 Hz tone pips presented at right or left ear.

Using a single ECD model, the dipole location for the N100m sources was successively calculated from the AEFs obtained from the hemisphere contralateral to the stimulated ear. We found that the location of the N100m current sources moved dynamically in medio-lateral and postero-anterior direction before the N100m peak. This direction was parallel to the surface of the supratemporal cortex. We speculate that the dynamic movement of N100m dipole reflects serial intracortical activation through horizontal fibers of pyramidal neurons in the auditory cortex, forming isofrequency bands in humans.

【発　表　者】 ② Chun Yu JIN[1], Isamu OZAKI, Yasumi SUZAKI[2], Masayuki BABA[1], Muneo MATSUNAGA[1], Isao HASHIMOTO[3],

所属：[1] 弘前大学医学部脳研神経統御部門

[2] 青森県立保健大学社会福祉学科

[3] 金沢工業大学人間情報システム研究所

【発表論文名】 ②：Selective attention to pitch or laterality induces short-term plasticity in human auditory cortex

【要　　　旨】 ② Early cognitive process in the primary auditory cortex was studied by measuring auditory evoked magnetic fields (AEFs) during selective attention tasks. We recorded AEFs to 400Hz and 4000Hz tone pips randomly presented at right or left ear with 1 sec interval. Subjects were instructed to respond to target stimuli during pitch (high or low) or laterality (left or right) discrimination tasks. In control session, 400Hz or 4000Hz tone alone was presented at left or right ear. Using a single dipole model, we calculated the location and strength of the N100m dipole for 400Hz and 4000Hz tones presenting as non-target and control stimuli, based on the AEFs obtained from the hemisphere contralateral to the stimulated ear. Dipole strength for auditory N100m current sources to 400Hz and 4000Hz tone stimuli was significantly enlarged in both pitch and laterality discrimination tasks. Furthermore, the N100m dipole distance between 400Hz and 4000Hz tones was significantly enlarged during pitch discrimination task but shortened during laterality discrimination task. We suppose that these dynamic changes in the N100m dipole reflect short-term plasticity in auditory cortical networks.

【出 張 期 間】 2002年11月15日〜22日

【学　会　名】 The 8th General Assembly of Asia Confederation for Physical Therapy（タイ王国・バンコク）

【発 表 者 名】 Masashi MIURA, Tohru KAWAGUCHI, Toshitada YOSHIOKA

【発表タイトル】 The Relationship Between Muscle Mass Measured by Multifrequency Bioelectrical Impedance Analysis and Muscle Strength in High-school Athletes.

【要　　　旨】【Background】

In providing physical therapy, understanding the body composition of the patient is considered to be one of the most important evaluation. Above all, for an athlete who is aiming to return to competitive activity, the percent body fat is an important that reflects his/her physical condition. In particular, athletes who need weight loss provide the best example.

【Objective】

The purpose of this study was to clarify the relationship between muscle mass by adding thorough verification with multifrequency bioelectrical impedance analysis and muscle strength, and the relationship between physical measurements including height, body weight and muscle strength.

【Methods】

The subjects were 95 high-school athletes (39 baseball players, 38 handball players and 18 judoists). All of them were male. We measured height, body weight and body mass index (BMI) as physical measurements, and lean body mass (LBM) and muscle mass of the upper and lower extremities as a body composition. The measuring device used was a multifrequency bioelectrical impedance analyzer (InBody 2.0, Biospace Co. Ltd., Seoul, Korea). Grip strength was measured as muscle strength of the upper extremity, and the peak torque of knee extensors as muscle strength of the lower extremity. Correlation between each data obtained from physical measurements and body composition, and grip strength and the peak torque of knee extensors, were studied.

【Results】

The mean height was 171.1 ± 5.4 cm (mean ± S. D.) , body weight 66.1 ± 8.7 kg, BMI 22.7 ± 2.9 and LBM 57.0 ± 5.5 kg. The mean muscle mass of the right upper extremity was 2.4 ± 0.3 liters (L), that of the left upper extremity 2.4 ± 0.3 L, that of the right lower extremity 6.5 ± 0.7 L and that of the left lower extremity 6.5 ± 0.7 L.

The results showed that body weight and LBM have strong correlation with muscle strength and that muscle mass of the upper extremity has a significant correlation with grip strength. A significant correlation between muscle mass of the lower extremity and the peak torque of knee extensors was also observed, but not very strong.

【Conclusion】

It was confirmed that high-school athletes are characterized by the strong correlation between the body weight or LBM and the muscle strength, and that the muscle mass does not always exhibit strong correlation with the muscle strength.