── 招日研究助成報告 ──

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2022年は国際抗てんかん連盟（The Asian Epilepsy Academy, ASEPA）よりSormoo先生をご推薦いただきました。Sormoo先生はモンゴルの脳神経内科医であり，ウランバートルにあるAlpha – Dolgion Neurology Hospitalというクリニックに勤務され，てんかん診療に携わっておられます。クリニックとはいえ，モンゴルでは総合病院でのてんかん診療がなされていなかったことから（2023年にMongol-Japan Hospitalでのてんかんセンターが立ち上がりました），以前よりモンゴルにおけるてんかん診療に貢献されてきたということになります。しかし，専門的トレーニングを受けていなかったことから，当院での研修を希望されました。

コロナ禍のため研修開始が延期となりましたが，2022年4月から研修を開始されました。当院では，症例検討会に加えて，脳波セミナーや発作ビデオ検討会などが毎週行われております。また，実臨床に即した研修として，初診外来の見学，外科カンファランス，病棟回診への参加があります。Sormoo先生はこれらの研修会とカンファレンスに参加し，見識を広めていらっしゃいました。長時間ビデオ脳波モニタリングや術前精査の経験はなかったことから，こうした事項を含めて，てんかん診療を幅広く学ぶことが出来，充実した研修であったと振り返っておられました。また，井上有史先生が主催されていたモンゴルと当院の医師とのケースカンファレンスにも参加され，症例提示や議論を行いました。モンゴルでは頭部外傷を病因とするてんかんが少なくないことから，外傷後てんかんの外科的治療に関する研究も行い，日本てんかん学会学術総会で発表を予定しております。

今後は，当院での経験を生かして，モンゴルのクリニックでてんかん診療を発展させることが期待されます。さらに，クリニックに通院できない患者さんのために遠隔地へ出向き，てんかんの診断や治療を行うとともに各地の脳神経内科医の教育も行っていく予定であります。モンゴルではてんかん外科治療も始まりつつあり，その適応を判断できる貴重な人材と考えられます。専門は脳神経内科医ですが，小児てんかん患者の診療に携わる機会もあり，当院での小児てんかん外科の症例を学んだ経験から，小児における外科治療の適応判断にも貢献したいと意欲を持っておられました。モンゴルにおけるてんかん診療の次世代のリーダーシップを担って頂けることを期待しております。

Summary Report

Fellowship Training Program in Epileptology and Clinical Electroencephalography

Battugs Sormoo

First, I would like to express my great gratitude to Professor. Inoue and the Japan Epilepsy Research Foundation for supporting me and allowing me the opportunity to practice at NHO Shizuoka Institute of Epilepsy and Neurological Disorders. Having the opportunity to study and practice here is a great investment for me personally and our underdeveloped country, as the field of Epilepsy, is just beginning to develop. In particular, the improvement of quality, and accessibility of epilepsy care services, which we desperately need, and the empowerment and training of medical professionals are among the most pressing problems we need. In our country, our immediate goal is to establish an epilepsy center and start implementing the necessary diagnostic standards for preparing patients for epilepsy surgery. In this regard, studying here allows me to improve my knowledge, learn step by step every time I get to know many clinical cases, and learn a lot from my doctors.

Out-patient clinics and In-patient Rounds:

As for the outpatient examination, it is a great advantage for me to attend the examination of patients for the first visit by Senior doctors, and I can attend both adult and pediatric examinations. I attend 2-3 patient examinations daily and an average of 10 every week. Every day, I get to know interesting clinical cases, discuss them with doctors based on Seizure Semiology, Routine EEG, MRI, Blood tests, and, if necessary, more detailed tests, etc., and gain more knowledge and experience from them. It is still vital for me to learn to develop a treatment and diagnosis plan that is suitable for each patient, such as to properly guide the patient who comes for the first visit, to include them in the following additional examination and diagnosis, etc., and I am still learning little by little. Previously, I did not know much about Genetic and Metabolic disorders, among the most common etiology of Pediatric Epilepsy. Still, now I am grateful to have increased my knowledge and experience.

It was an excellent opportunity to improve my skills by studying long-term video EEG reading, especially as Ictal EEG semiology in combination with clinical symptoms, and learning to evaluate the evolution of pre-ictal, ictal, and post-ictal phases. Another advantage was that I could independently study the EEG and other data of patients in the ward with the help of my ID. Also, I had the opportunity to observe and discuss with the doctors when Ictal-SPECT, Wada test, fMRI, and fMapping were performed for the necessary patients.

Epilepsy surgery:

On the 2nd and 5th days of every week, I attend the morning and evening neurosurgical conferences and discuss the pre-surgical evolution of surgical-candidate epilepsy patients and their detailed examination and symptoms. In particular, clinical signs are combined with imaging and instrumental methods (video EEG, MRI, ictal and inter-ictal SPECT, FDG-PET, MEG, and, if necessary intra-cranial EEG) to provide comprehensive results, and postoperative follow-up is also regularly performed. It helped me a lot to improve my knowledge and skills. Also, it is good that I have the opportunity to attend to the operations being performed every week, and surgeons

explain to me, and I can see and observe details. During this training, I saw many procedures such as Lobectomy, Lesionectomy, Hemispherotomy, Corpus callosotomy, and Subdural-electrode placement.

Research paper reading, EEG-lecture, A4 round- Pediatric conference, and A5/6 round-Psychiatric conference.

By attending the weekly EEG lecture and seizure conference, I learned how to read EEGs, seizure classification, and EEG interpretation. I also learned the Principles of EEG instrumentation, Inter-ictal and Ictal VHFO, Normal EEG variables, and the EEG differences for specific syndromes. It improved my skills. I attended one session of intracranial EEG analysis. I mainly participated in Professor. Inoue's EEG lecture (American Clinical Neurophysiology Society's Standardized The Critical Care EEG Terminology: 2021 Version) as we discussed that terminology.

I also attend weekly research meeting on Monday, which helps us learn how to read a clinical research paper, what to look for points, and provides access to new research information.

I attend weekly pediatric round conferences where we discuss difficult-to-resolve cases and discuss future treatment plans. Also, every week, I participate in the psychiatric round conference, where we discuss on a case-by-case basis how to distinguish between epileptic and non-epileptic seizures in the clinic. In some cases, the clinical manifestations may overlap, and we discuss the analysis of many issues.

Lastly, I would like to express my great gratitude to all the Doctors, Nurses, and Technicians at NHO Shizuoka Institute of Epilepsy and Neurological Disorders. The knowledge and experience I have gained here will help my patients.

Thank you very much.