PUBLIC HEALTH SERVICE

Meeting of the Interagency Coordinating Committee on Human Growth Hormone and Creutzfeldt-Jakob Disease

November 27, 2018, 3:00 PM

National Institutes of Health Building 31, Room 9A22 Bethesda, Maryland

Committee Members Attending

Dr. Patricia Bright, FDA (by phone)

Dr. Judith Fradkin, NIDDK

Dr. Ellen Leschek, NIDDK

Dr. Avindra Nath, NINDS

Dr. Griffin Rodgers, NIDDK, Chairman

Dr. Lawrence Schonberger, CDC (by phone)

Committee Members Absent

Dr. James Mills, NICHD

Also Attending

Dr. Joe Abrams, CDC (by phone)

Dr. Greg Germino, NIDDK

Dr. Ryan Maddox, CDC (by phone)

Amy Reiter, NIDDK

Dr. B. Tibor Roberts, NIDDK

Dr. Philip Smith, NIDDK

Dr. Robert Tilghman, NIDDK

Diane Tuncer, NIDDK

Westat Contract

Dr. Leschek reported that the contract with Westat has been renewed for another 5 years.

National Hormone and Pituitary Program (NHPP) Cohort Update

At the meeting, Dr. Leschek noted that there have been no new clinically or pathologically confirmed cases since the last meeting, nor have there been any new clinically suspicious cases. To date, no CJD has been reported in Program recipients who began treatment with NHPP hormone after 1977, when production of NHPP hormone was moved to a laboratory (headed by Dr. Albert Parlow) that used a new method of purifying pituitary hGH.

Dr. Leschek followed up on a case discussed at the last meeting in which a death listed in the National Death Index (NDI) Plus database potentially matched a name in the cohort, but the match was inconclusive because of a paucity of information about the cohort member in the Westat database. Dr. Leschek reported that it is impossible to know conclusively whether the name in the NDI Plus database was the same person in the cohort. She added that the cause of death was not suspicious for CJD. Therefore, a new category, "Possible Cohort Deaths – Cannot Be Confirmed," was added to the surveillance documents. The Committee will not consider these cohort members deceased unless we receive additional confirmatory data.

Dr. Leschek reviewed one death in the cohort that occurred in 2014. It was concluded, based on all available records, that the death was the result of other illnesses and was not clinically suspicious of CJD.

Dr. Leschek noted that there have been two instances where cohort members donated their bodies upon death for research or instructional purposes. Neither death was clinically suspicious for CJD, and no bodily organs or tissues were transplanted. The committee discussed possible actions to curb such donations in the future, including working with donation organizations to screen potential donors for growth hormone recipients who could pose a risk for post-mortem CJD transmission.

Dr. Leschek also described the growing difficulties in obtaining health records of deceased cohort members because the next-of-kin on file, who are typically the cohort members' parents, have been aging and dying, and the NIH does not have the authority to contact other next-of-kin. She acknowledged the work of the CDC, which has been helpful in procuring such records.

Dr. Nath reviewed <u>published research</u> from Drs. Abrams and Schonberger concerning amyotrophic lateral sclerosis (ALS) cases in relatively young (under 50 years old) members of the cohort. In addition to the three cases identified in the paper, there was an additional ALS case identified in the literature, bringing the total to four in the cohort. While these observations raise the possibility that ALS might be transmissible, the Committee agreed there is still insufficient evidence to conclusively link these cases to administration of NHPP growth hormone.

<u>Updates on Fact Sheet and Public Inquiries</u>

Ms. Tuncer stated that the comprehensive and summary fact sheets were updated to reflect the new foreign case mentioned at the 2017 meeting and to include the link to the amended FDA guidance for industry to reduce risk of CJD transmission from blood and blood products. Scientific papers discussed at the 2017 meeting were added to the resource list. For reference, the comprehensive fact sheet is here, the summary version is here, and the resource list is here.

Ms. Tuncer also reported that there were nine inquiries regarding hGH and CJD over the past year (compared to 13 the year before). Five were from confirmed cohort members. None of the calls were suggestive of potential new cases of CJD.

Recent Progress in CJD Research

Dr. Schonberger noted three recent papers of interest:

- 1. Orrù CD, Soldau K, Cordano C, *et al*. Prion seeds distribute throughout the eyes of sporadic Creutzfeldt-Jakob disease patients. *MBio*. 2018; 9(6): e02095-18. (Also: NIH press release on this article)
- 2. Jucker M and Walker LC. <u>Propagation and spread of pathogenic protein assemblies in neurodegenerative diseases</u>. *Nat Neurosci*. 2018; 21: 1341-1349.
- 3. Hervé D, Porché M, Cabrejo L, *et al*. Fatal Aβ cerebral amyloid angiopathy 4 decades after a dural graft at the age of 2 years. *Acta Neuropathol*. 2018; 135: 801-803.

Dr. Schonberger reported 3 new foreign (non-U.S.) hGH/CJD cases in 2018, all from the United Kingdom (bringing the U.K total to 79 for hGH-related cases). This brings the total to 213 foreign cases.

Griffin P. Rodgers, M.D. Director, NIDDK