16 year follow-up of surgically exposed patients with CJD in the UK

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INTRODUCTION

Transmission of Creutzfeldt-Jakob disease (CJD) by surgical instruments has been documented [1]. In the UK, since 2000, 182 patients have been identified, of which 26% have been surgically exposed [2]. The risk of transmission is greatest for surgical operations involving neurosurgery [3].

METHODS

The elements which determine whether a surgical incident has occurred and how many surgical contacts should be traced and informed are outlined as “Index Patient and Operation Factors” in Figure 1. CJD status of index patient. Surgical contacts may be informed in connection with index patients who are:

- Diagnosed with confirmed or probable CJD
- At risk of variant CJD through treatment with blood components from a donor who later developed variant CJD
- At risk of familial/inherited prion disease

Time from procedure to symptom onset. The surgical lookback period is 8 years for patients with sporadic, inherited or iatrogenic forms of CJD, and extends to 180 for patients with or at risk of variant CJD.

Tissue infectivity. Central nervous system tissues of the brain, posterior eye and spinal cord are defined as high infectivity and olfactory epithelium as medium infectivity for all types of CJD. In addition lymphoid tissues are defined as medium infectivity for variant CJD. More surgical contacts are traced for higher infectivity tissues.

Public health follow-up of surgical contacts includes records flagging and annual review to identify date and cause of death. Periodic cross-referencing with the national CJD surveillance records and a post mortem review of notes by a neurologist is done to identify any indication of neurological disease prior to death. Patients and contacts who died within 1 year of follow-up of patients post confirmed diagnosis were traced.

RESULTS

Between 2000 and 2016, CJD incidents involving 18 index patients and 39 surgical procedures led to 266 contacts being traced and informed. Half of the index patients had been diagnosed with confirmed/probable (6 sporadic, 2 variant) and 1 genetic...