A 10-year follow-up study of tick-borne encephalitis in the Stockholm area and a review of the literature: need for a vaccination strategy.

https://arctichealth.org/en/permalink/ahliterature35021

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Publication Type: Article

Keywords: Adolescent
Adult
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Female
Follow-Up Studies
Headache - complications
Humans
Male
Mental Disorders - complications
Middle Aged
Musculoskeletal Equilibrium
Prevalence
Questionnaires
Sensation Disorders - complications
Seroepidemiologic Studies
Sweden - epidemiology
Vaccination
Abstract: 143 people treated for tick-borne encephalitis (TBE) were included in a retrospective follow-up study. Sequelae and epidemiological characteristics in 114 individuals were analysed. The case fatality rate and the prevalence of residual paresis were low, 1.4 and 2.7%, respectively. However, 40 (35.7%) individuals were found to have a postencephalitic syndrome after a median follow-up time of 47 months, and a majority (77.5%) of these were classified as moderate to severe. Various mental disorders, balance and co-ordination disorders and headache were the most frequently reported symptoms. Increasing age was correlated to a longer duration of hospital stay, longer convalescence and increased risk of permanent sequelae. Results from a neuropsychiatric questionnaire showed marked differences between the subjects with sequelae compared to controls. 57% had noticed a tick bite before admission, and 48% were aware of at least one person in their environment who previously had contracted TBE. 79% were permanent residents or visited endemic areas often and regularly. In conclusion, we have found that TBE in the Stockholm area has a low case fatality rate, but gives rise to a considerable number of different neurological and mental sequelae, which justifies vaccination of a defined risk population in endemic areas.

PubMed ID: 8863349 View in PubMed
Absence of evidence of Borna disease virus infection in Swedish patients with Chronic Fatigue Syndrome.

https://arctichealth.org/en/permalink/ahliterature200265

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Date: Oct-1999

Language: English

Publication Type: Article

Keywords: Adult
Aged
Blotting, Western
Borna Disease - virology
Borna disease virus - immunology - isolation & purification - pathogenicity
Enzyme-Linked Immunosorbent Assay
Fatigue Syndrome, Chronic - virology
Female
Humans
Leukocytes, Mononuclear - chemistry - metabolism - virology
Male
Middle Aged
Reverse Transcriptase Polymerase Chain Reaction
Sweden

Abstract: Chronic Fatigue Syndrome (CFS) is characterized by debilitating fatigue, somatic symptoms and cognitive impairment. An infectious basis has been proposed; candidate agents include enteroviruses, herpesviruses, retroviruses and Borna disease virus (BDV), a novel neurotropic virus associated with neuropsychiatric disorders. Sera and peripheral blood mononuclear cells (PBMC) from Swedish CFS patients were assayed for evidence of infection using ELISA and Western immunoblot for detection of antibodies to BDV proteins N, P and gp18; and using nested reverse transcriptase polymerase chain reaction (RT-PCR) for detection of BDV N- and P-gene transcripts. No specific immunoreactivity to BDV proteins was found in sera from 169 patients or 62 controls. No BDV N- or P-gene transcripts were found through RT-PCR analysis of PBMC from 18 patients with severe CFS. These results do not support a role for BDV in pathogenesis of CFS.

PubMed ID: 10568886 View in PubMed
Acute hepatitis B and hepatitis D co-infection in the Stockholm region in the 1970s and 1980s--a comparison.

https://arctichealth.org/en/permalink/ahliterature12134

Author: G. Lindh, L. Mattsson, M. von Sydow, O. Weiland

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Source: Infection. 1990 Nov-Dec;18(6):357-60

Language: English

Publication Type: Article

Keywords: Acute Disease, Adolescent, Adult, Aged, Alanine Transaminase - blood, Bilirubin - blood, Child, Child, Preschool, Comparative Study, Female, Hepatitis B - complications - epidemiology, Hepatitis D - complications - epidemiology, Humans, Male, Middle Aged, Prevalence, Retrospective Studies, Substance Abuse, Intravenous - complications, Sweden - epidemiology

Abstract: The frequency and clinical features of acute hepatitis B virus (HBV) infection with and without a hepatitis D virus (HDV) co-infection was investigated retrospectively in the Stockholm region during two different time periods, September 1977-October 1978 and November 1984-October 1986. Totally, 31/229 (14%) patients with acute HBV infection had a HDV co-infection. No change in the frequency of co-infections, 12% and 15%, respectively, was observed between the 1970s and 1980s. Among the 31 HDV co-infected patients 74% were intravenous drug addicts. Totally 23/66 (35%) intravenous drug addicts with acute HBV infection had HDV co-infection. Clinically a biphasic rise of the serum levels of alanine aminotransferase and bilirubin was noted among 63% of the HDV co-infected patients but only among 8% of the solely HBV infected patients (p less than 0.001). A clinically more severe hepatitis was seen significantly more often among the HDV co-infected patients than among the solely HBV infected.

PubMed ID: 2076908 View in PubMed
Acute viral hepatitis, types A, B and non-A, non-B: a prospective study of the epidemiological, laboratory and prognostic aspects in 280 consecutive cases.

Author: O. Weiland, J V Berg, B. Flehmig, G. Lindh, P. Lundbergh
Date: 1981
Language: English
Publication Type: Article
Keywords: Acute Disease, Adolescent, Adult, Age Factors, Aged, Child, Child, Preschool, Hepatitis A - epidemiology, Hepatitis B - epidemiology, Hepatitis C - epidemiology, Hepatitis, Viral, Human - epidemiology - etiology, Humans, Middle Aged, Norway, Prognosis, Prospective Studies, Sex Factors
PubMed ID: 6797056

Chronic hepatitis B. Impact of hepatitis D virus superinfection and the hepatitis B e-system on histological outcome, and correlation of the hepatitis B e-system to HBV-DNA in serum.

Author: G. Lindh
Date: 1986
Language: English
Publication Type: Article
Abstract: Chronic evolution after acute hepatitis B virus infection. During a 13 months period 1977-1978 a total of 129 cases of acute viral hepatitis type B occurred among patients who were admitted with hepatitis to Roslagstull, Hospital, Stockholm, Sweden. Less than 1% progressed to chronicity. Prevalence of Delta superinfection was studied among 60 patients with chronic hepatitis B. Nineteen (32%) were anti-delta positive. The majority of the positive patients were either non-European immigrants or addicts, both 9/19 (47%). Infections with the delta agent was found to have occurred in Stockholm already in the early 1970s. Rate of HBeAg clearance during chronic HBV was studied among 36 HBeAg positive patients. Seroconversion to anti-HBe was noted in 17 patients (47%), whereas HBeAg persisted in 19 during a mean follow-up period of 53 months. The spontaneous annual HBeAg seroconversion rate was 11%. HBeAg clearance occurred as frequently among homosexual men as among patients in other categories. However, 12/14 homosexual men were HBeAg positive after 2 years follow-up, compared with 1/13 drug addicts. Thus, homosexual men seemed to require a longer time for HBeAg seroconversion than i.v. drug addicts. HBV-DNA in serum, a strong indicator of viral particles and infectivity was analysed among patients with HBeAg seroconversion, initial HBeAg negativity and/or delta superinfection. HBV-DNA was found in 75-80% of our HBeAg positive patients. A correlation between chronic liver disease and presence of HBV-DNA in serum was also found. Thus, HBV DNA was found in 63% of patients with CAH or CAH/Cl as compared with only 39% of patients with CPH. Delta infected patients had HBV-DNA more often than those without hepatitis D infection. Seven delta infected, anti-HBe positive, patients were still HBV-DNA positive five to eight years later. Therefore delta infected anti-HBe positive patients can be infectious for prolonged periods. Histological outcome. 63% (12/19) anti-delta positive patients were classified as CAH with or without cirrhosis as against 39% (16/41) of the anti-delta negative patients. Eleven of 15 homosexual men (73%) had histological findings classified as CAH or CAH/Cl. None of them were superinfected with HDV. Thus homosexual men developed severe hepatic lesions without being delta infected. In contrast 78% (7/9) i.v. drug addicts with CAH were delta infected. A numerical scoring system was applied and compared with conventional morphological classification of liver histology to assess the histological outcome of 42 patients with repetitive liver biopsies.
Critical life events, infections, and symptoms during the year preceding chronic fatigue syndrome (CFS): an examination of CFS patients and subjects with a nonspecific life crisis.

https://arctichealth.org/en/permalink/ahliterature46266

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Source: Psychosom Med. 1999 May-Jun;61(3):304-10

Language: English

Publication Type: Article

Keywords: Adult
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Case-Control Studies
Comorbidity
Comparative Study
Depression
Fatigue - epidemiology
Fatigue Syndrome, Chronic - epidemiology - psychology
Female
Fever - epidemiology
Humans
Infection - epidemiology
Irritable Mood
Life Change Events
Male
Mental Recall
Middle Aged
Observer Variation
Pain - epidemiology
Self Assessment (Psychology)
Stress, Psychological - epidemiology
Sweden - epidemiology
OBJECTIVE: The purpose of this study was to describe the sequence of psychosocial events and infections preceding the onset of chronic fatigue syndrome (CFS). This information was related to the temporal development of crucial symptoms in relation to the onset of, namely, fatigue, sadness, irritability, pain, and feeling of fever. METHODS: A personal interview was conducted in 46 patients (mean age, 39.5 years; SD, 9 years) who fulfilled international CFS criteria. These patients were matched with regard to age and gender to 46 carefully matched control subjects. Twenty-three percent of the study subjects were men, and 77% were women. The patient at first identified the month that coincided with the onset of CFS. Similarly, each control subject was asked to identify a "very difficult period" within approximately the same period as the patient with whom the control subject was matched. A list of 14 different life events was perused. Participants were asked to identify for each month whether each of the listed events had occurred. Furthermore, they were asked to rate the importance of the events they had experienced. In addition, for each of the cardinal symptoms (fatigue, sadness, irritability, pain, and feeling of fever) and for each month, the subjects were asked to rate, on a visual analogue scale, the symptom intensity. Also, the number of infections was noted. RESULTS: A statistically significant group difference in fatigue intensity existed during the period 4 to 10 months before the onset of CFS. During the 3 months preceding the diagnosis for the CFS patients or the peak of the crisis for the control group, there was a dramatic rise in fatigue in both groups. The CFS group reached a much higher fatigue level, which leveled off somewhat during the first year of follow-up but still remained very high in comparison with the control group, which reached precrisis levels 4 months after the peak. Similar patterns were observed for fever and pain. With regard to sadness and irritability, no group difference was observed during the period preceding the crisis. In the patient group, the level stayed high throughout the whole first year of follow-up, whereas a slow return started in the control group; precrisis levels were reached after 1 year in this group. The prevalence ratio (CFS patients/control subjects) for negative events was around 1.0 for the periods 4 to 12 months preceding CFS but 1.9 during the quarter year preceding the onset. For infections, the prevalence ratio increased successively during the four quarters preceding CFS (from 1.4 to 2.3). CONCLUSIONS: According to the retrospective self-reports, there were differences between the groups in fatigue, pain, and feeling of fever during the months preceding the crisis. With regard to depressive and irritable feelings, no preillness differences were reported between the groups. There was a reported excess prevalence of both infections and negative life events during the quarter year preceding the onset of CFS or crisis. Potential sources of error are discussed. These findings must be replicated in longitudinal studies.

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Arctic Health
Delta infection among patients with chronic hepatitis B in the Stockholm region.

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Author: G. Lindh
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Language: English

Publication Type: Article

Keywords: Adolescent
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Biopsy
Emigration and Immigration
Female
Hepatitis B - epidemiology - immunology
Hepatitis B Antibodies - analysis
Hepatitis B Antigens - immunology
Hepatitis B Surface Antigens - immunology
Hepatitis delta Antigens
Hepatitis, Chronic - epidemiology - immunology
Humans
Liver - pathology
Male
Middle Aged
Radioimmunoassay
Substance-Related Disorders
Sweden

Abstract: The prevalence, epidemiology and consequences of delta infection were analysed in 60 patients attending the Roslagstull Hospital for Infectious Diseases, Stockholm, Sweden, between 1972 and 1982. All of the patients had biopsy-documented chronic hepatitis B. Using radioimmunoassay techniques, sera from all patients were tested for antibodies to hepatitis A virus, for hepatitis B surface antigen and the corresponding antibody, for antibodies to hepatitis B core antigen, for hepatitis B e antigen and the corresponding antibody and for antibodies to delta antigen. All 60 patients underwent a liver biopsy which was repeated in 28 patients. 32% of the patients (19/60) were found to be anti-delta positive. The majority of the anti-delta positive patients were either immigrants from non-European countries or addicts (both 9/19 or 47%). Infections with delta agent were found to have already occurred in the Stockholm region in the early 1970s. During the study period, four of the patients developed clinical and laboratory signs of acute hepatitis in association with a delta infection. Among the anti-delta positive patients, 63% (12/19) were classified as having chronic active hepatitis, with or without cirrhosis, as against 39% (16/41) of the anti-delta negative patients. Histological progression to cirrhosis was observed in two of the four anti-delta positive patients with initial chronic active or chronic persistent hepatitis.

PubMed ID: 6706409 View in PubMed

Efficacy of human leucocyte alpha-interferon treatment for chronic hepatitis C virus infection.
A total of 42 Swedish patients with biopsy-proven chronic hepatitis C virus (HCV) infection were treated with a natural human leucocyte alpha-interferon (HuIFN-alpha-Le), Alfanative (BioNative AB, Umeå, Sweden) in an open uncontrolled study. Two patients were withdrawn from treatment within 2 weeks due to non-compliance and were omitted from further analysis, and 40 patients (17 females), mean age 39 years (range 24-71) completed the study. All patients were HCV RNA-positive in serum prior to treatment, with raised alanine aminotransferase (ALT) levels > 1.5 times the upper normal limit known for more than 6 months. Interferon was given at a dose of 3 MU t.i.w. for an intended 24 weeks and follow-up was a further 24 weeks after treatment. Biochemical non-responders were withdrawn from treatment within 12-16 weeks but continued follow-up. Overall 21/40 (52.5%) patients had a complete biochemical response with normal ALT levels at the end of treatment. Sustained response during follow-up was seen in 8 (20%) whereas 13 (32.5%) had a non-sustained response. At the end of treatment 23 (58%) patients had undetectable serum HCV RNA and 9 (23%) at follow-up. Patients with sustained, non-sustained and non-response had a mean pretreatment HCV RNA level of 3.2 x 10^5, 2.5 x 10^6 and 3.2 x 10^6 genomes/ml, respectively, differences that did not reach statistical significance. Of the patients 3, 9, 10 and 14 had genotype 1b, 3a, 1a, and 2b, respectively, and 4 had mixed genotypes. Of the 23 patients with genotype 2b or 3a, 7 had a sustained response vs. none of the 13 patients with genotype 1a or 1b (p = 0.03). No patients with cirrhosis had a sustained response whereas 4/18 with chronic persistent and 4/18 with chronic active hepatitis had such a response.
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GBV-C/HGV infection in hepatitis C virus-infected deferred Swedish blood donors.

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English

Article

Adult

Blood Donors
Female

Flaviviridae - immunology - isolation & purification
Hepatitis C - immunology - virology
Hepatitis, Viral, Human - immunology - pathology - virology
Humans
Male
Middle Aged
RNA, Viral - analysis
Research Support, Non-U.S. Gov't
Sweden

Viremia - immunology - virology

Sera from 62 hepatitis C virus (HCV)-infected Swedish blood donors were tested by a nested polymerase chain reaction using primers targeting the 5'-noncoding region of the GB virus-C/hepatitis G (GBV-C/HGV) genome and an enzyme-linked immunosorbent assay that detects antibodies to the envelope protein E2 of GBV-C/HGV (anti-E2). Fourteen (22%) and 21 (34%) of the 62 blood donors were found to be GBV-C/HGV RNA and anti-E2 positive, respectively. None of the blood donors was positive for both GBV-C/HGV RNA and anti-E2. Thus, 35 of 62 (56%) HCV-infected donors had been exposed to GBV-C/HGV infection. At sequencing of the 14 GBV-C/HGV isolates, 12 were identified as subtype 2a and 2 as subtype 2b. One of 7 (14%) donors with mild liver disease such as steatosis and nonspecific reactive hepatitis had been exposed to GBV-C/HGV vs. 34 of 55 (62%) with chronic hepatitis with or without cirrhosis (P = 0.04). All other differences in histology were small between HCV and dual HCV GBV-C/HGV-infected donors. In conclusion, more than half of HCV-infected Swedish blood donors in this study were positive for either GBV-C/HGV RNA or anti-E2. GBV-C/HGV viremia and seropositivity were mutually exclusive.