Figure 3 T cell rich B cell non-Hodgkin's lymphoma (H&E staining, 400 $\times$; inset: immunohistochemistry with Avidin-Biotin method and DAB as chromogen, 400 $\times$) T cell: CD 45 RO, B cell: CD 19.

Figure 4 Paraneoplastic pemphigus (H&E staining, 400 $\times$).

Take-home message

Owing to the preneoplastic potential in the hyaline vascular type, simple excision of the affected lymph node may not be sufficient in localised Castleman disease.

prednisone regimens, or Cyclophosphamide, Hydroxydaunorubicin, Oncovin and Prednisone regimens for treatment of Non Hodgkin's Lymphoma regimens, has an established role in CD-NHL treatment.

Thus, CD is a rare condition with an obscure pathogenesis. With preneoplastic potential in the hyaline vascular type, simple excision of affected lymph node may not be sufficient in LCD.

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Atypia in fine needle aspirates of breast lesions

The paper by Tran *et al* on the histological correlates of atypia in fine needle aspirates (FNAs) of the breast was useful in suggesting which cytological features are likely to indicate malignancy.¹ However, their conclusion that 67% of atypical FNAs are from benign lesions and 33% malignant tumours may be misleading.

In their review of 5340 cases, 363 (7%) of breast FNAs were diagnosed as atypical, but the authors include in their analysis only those 98 atypical aspirates that had a histological follow-up. The reason why the remaining 265 lesions were not biopsied was probably because, in most cases, they were clinically and radiologically benign; omitting these cases from analysis therefore constitutes a significant workup (verification) bias.² The true proportion of atypical FNAs that were from benign lesions is therefore likely to be significantly higher than their figure of 67% suggests, and a review of these patients' medical records would allow a fairly accurate estimate of the true figure. Including all 363 atypical FNAs in their analysis would also, by increasing the size of the cohort, address one of the criticisms of the study made by the authors themselves, thereby increasing the accuracy of the results by narrowing their CIs.

Furthermore, given that the assessment of cytological atypia is subjective, it is also rather surprising that none of the 98 aspirates originally reported as atypical was changed to either benign or malignant on review. This suggests that a further bias, namely review bias, may be present, as these FNAs were not subject to blinded review (by being mixed in with an unknown number of benign and malignant aspirates, for example). Knowing that all the FNAs reviewed had already been considered atypical might have unconsciously biased the reviewers in their interpretation of the cytological characteristics.

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Injection anthrax causing compartment syndrome and necrotising fasciitis

A 28-year-old woman was diagnosed with injection anthrax infection causing compartment syndrome and necrotising fasciitis of her arm. She was treated successfully with intravenous benzylpenicillin, clindamycin, ciprofloxacin and metronidazole. While in hospital she underwent two fasciotomies and six debridements of necrotic tissue over a 3-week period. Subsequent skin grafting was successful.

CASE REPORT

A 28-year-old female intravenous drug user presented with a 2-day history of increasing pain and swelling in her right arm, extending to her right shoulder. She had last injected heroin into her right antecubital fossa 5 days previously.

On admission she was feverish at 38°C and tachycardic. There was massive swelling of the arm, extending from her fingers to her shoulder, but no overt erythema. Initial laboratory findings revealed total white cell count of $15.5 \times 10^9/l$, with neutrophilia and C-reactive protein of 38. She was diagnosed with compartment syndrome and was taken to theatre the same day for multicompartiment fasciotomy. On inspection, all tissue looked viable and no abscesses were identified. Swabs taken at surgery did not yield any growth on culture.

At this stage, this was considered to be a possible case of anthrax as the patient was an intravenous drug user with a clinical syndrome compatible with anthrax. The patient was given intravenous benzylpenicillin 2.4 g four times a day, clindamycin 1.2 g four times a day, ciprofloxacin 400 mg twice a day, and metronidazole 500 mg three times a day. Blood cultures were processed locally, while blood samples for anthrax PCR, toxin levels and serology were sent to the Special Pathogens Reference Unit, Porton Down, Salisbury, UK. Results for PCR on blood were negative, while results for toxin and antibody to protective antigen were equivocal.

Following surgery, the patient developed fever, tachycardia, hypotension and bleeding from her fasciotomy site. She returned to theatre 2 days postoperatively for a re-exploration of the wound. Necrotic areas of skin were identified in the antecubital fossa and upper arm. Fasciotomies were extended proximally in the upper arm, and two tissue biopsies were sent to the pathology department. A tissue sample was also sent to the microbiology department and this was forwarded directly to the Special Pathogens Reference Unit for *Bacillus anthracis* PCR.

Figure 1 Gram-positive bacilli on histopathology.

Figure 2 Arm after debridement of necrotic skin and fascia.