TRAUMATIC RUPTURE OF THE SPLEEN IN RUBELLA

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At the Cambridge Military Hospital in the past eighteen months there have been three cases of traumatic rupture of the spleen. Two cases were associated with severe trauma: (a) a close range blank cartridge wound splitting the splenic substance, and (b) a heavy blow with a milk bottle delivered by an irate wife—both causing severe bruising of the skin and muscles. The third case was due to a glancing blow, insufficient to bruise skin or muscles, by the tailboard of a lorry.

CASE REPORT

Spr. C., aged 18 years, was admitted to C.M.H. at 5.30 p.m. on 13th February. He had been struck by the tailboard of a lorry on the left costal margin some one and a half hours previously. His unit was remote from the hospital and necessitated a twenty-mile drive. He had been given morphia gr. ½ by his unit M.O. to sedate him on the journey. On admission he was shocked, being pale and sweating, and complaining of generalized abdominal pain and over the lower left chest. He made no complaint of shoulder-tip pain.

On examination, his pulse rate was 95 per minute and blood pressure 70/40 mm. Hg. His abdomen was tense but no true rigidity was present. There was dullness on the left side of the abdomen, but no shifting dullness could be detected. His chest was free from abnormal signs. It was noted that there was no bruising or abrasion of the skin in the area of contact with the tailboard.

Radiograph.—No fractured ribs; no free gas in peritoneal cavity. A diagnosis of ruptured spleen was made, taking into account the effects of the morphia.

Operation (P. J. W.).—Left paramedian incision revealed free blood in peritoneal cavity. The spleen was ruptured in several pieces, having been torn completely from the splenic pedicle. At operation it was noted that the spleen was enlarged roughly three times that of the normal. He was transfused with two pints of blood during the operation. As a point of interest, it was noted that there was no muscle bruising at all. His post-operative course was uneventful apart from some degree of ileus of the gut, which was treated by gastric suction and intravenous fluids. On 19th February (sixth post-operative day) he complained of feeling unwell and his temperature was found to be 100.4° F. This was followed on the next day by the development of a fine maculo-papular rash all over his body. A diagnosis of rubella was made, and he was transferred...
to the isolation ward. On 22nd February (ninth post-operative day) the wound was apparently healed and the sutures were removed. This was followed shortly after by bursting of the wound and prolapse of coils of small gut, omentum and colon. He was returned to the theatre where he was re-sutured. At operation it was observed that there had apparently been little or no evidence of healing of the wound. Post-operatively his condition never gave rise to a moment's anxiety and he was discharged on 14th March, with a firmly healed scar.

Pathological Report.—The spleen was slightly enlarged, with considerable lymphoid hyperplasia in non-traumatized tissue.

Discussion

The points of interest in this case were:

(a) The trivial nature of the trauma, associated with severe laceration of the spleen.
(b) Development of rubella in the immediate post-operative period.
(c) The failure of the wound to heal by first intention.

The literature dealing with traumatic rupture of the spleen was consulted and 146 references found. However, in all these, none referring to traumatic rupture of the spleen associated with rubella was found.

Rupture has been described in a series of conditions, kala-azar, malaria, infective mononucleosis and scarlet fever, all of which lead to alterations in the splenic substance. Similarly in rubella there is a generalized lymphadenopathy and an associated splenomegaly which may be sufficient to be palpable. In the American literature, reference to ruptured hyperplastic spleens is made (1) The microscopic picture was very much like that we have seen. In one case this was followed by the development of a fine maculo-papular rash which was diagnosed as sulphonamide sensitivity. The similarity in the cases described is further enhanced by the breakdown post-operatively of the wounds of two of the three cases described.

Reference


* I made several attempts to contact the author of this particular article, as owing to the great similarity of certain features of the cases involved, I was particularly anxious to ascertain from him whether there was any possibility that in his cases the rashes described could in fact have been due to rubella. Unfortunately all attempts at contact failed, so in that respect no progress has been made.