Early Decades of Bacterial Endocarditis

By

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There is no mention of bacteria in relation to disease in any volume of Lancet prior to 1865, (Postner, 1961).

Bacteria in blood was seen for the first time in 1849 by Davaine and Pollander, they studied the blood of anthax infected cows. In 1869 Charles Bastain (cited by Morgan and Bland, 1959) studied the development of bacteria in blood. Dr. Salisbury in 1869 (cited by Morgan, & Bland 1959) correlated bacteria in blood to various forms of fever.


Blummer in 1923 (cited by Morgan and Bland 1959) predicted that chemotherapy might in the future be developed to a degree permitting elimination of these organisms from the body. In 1935 Hammon and Reinhoff (cited by Morgan & Bland 1959) cured a case of SABE by surgery, Touroff and Vessel did the same in 1940.

Brill and Libman in 1899, (cited by Waisburn, 1951) were among the first to call attention to blood stream invasion by Pseudomonas. In 1904 Eastman and Keene (cited by Waisburn, 1951) reported a case of Bacillus Pyocyaneus. Sepsis due to Escherichia coli was reported by Jacob in 1909 and Fatty and Keefer in 1924 (cited by Waisburn, 1951).

Other reports in older literature with regards to Escherichia coli sepsis were by Draper in 1910 (cited by Waisburn, 1951), Panton and Tidy 1913, Holzman in 1913 and Pope in 1921 (cited by Waisburn 1951). The report of Hoffman, Cuellman

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and Sayre in 1951 reviewed the 13 well documented cases of *Escherichia Coli* endocarditis in the literature. The increased incidence of bacteemia due to *Escherichia coli* in cirrhotic patients was noted by Hamet in 1894 (cited by Waisburn, 1951) and more recently Whipple and Scott in 1929 (cited by Waisburn 1951) both have pointed out the frequency with which bacteria enter the blood stream as result of urologic procedures. He made routine blood cultures on urologic patients, and in two years obtained 82 positive cultures.

In 1933 Fish, Hand and Kein (cited by Waisburn, 1951) summarized four cases of Pseudomonas endocarditis in the literature and added one of their own. Morgues and Anderson in 1943 also noted this tendency for Pseudomonas to cause blood vessel lesions. The review of Stanley in 1947 (cited by Waisburn, 1951) gives an excellent account of the modes of virulence of Pseudomonas aeruginosa.

A dearth of clinical reports of bacteria due to Aero bacter aerogenes was found in literature. This is probably due to the fact that earlier authors included Aerobacter aerogenes in the Coli group. One such case was reported by Duncan and Co. workers in 1951.

The incidence of bacterial endocarditis as seen through the literature is given below:

<table>
<thead>
<tr>
<th>Date treated</th>
<th>Author</th>
<th>No. of cases of bacterial endocarditis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1902—1912</td>
<td>Libman (cited by Hall &amp; Dowling, 1966)</td>
<td>86</td>
</tr>
<tr>
<td>1904—1926</td>
<td>Norris (cited by Hall &amp; Dowling, 1966)</td>
<td>126</td>
</tr>
<tr>
<td>Prior to 1927</td>
<td>Rothschild.</td>
<td>104</td>
</tr>
</tbody>
</table>

Prior to 1937 Keefer et al (1937) 54
1913—1939 Christian (1941) 174
1941—1956 Hill and Bayrd (1960) 273
1945—1949 Cates and Christic (cited by Hall and Dowling, 1966) 442
1946—1953 Newman et al 1954 52
1951—1957 Geraci (1958) 172
1952—1959 Feiedberg et al (1961) 95
1951—1961 Hall and Dowling, 1966 85

Unfortunately detailed information is missing from many more recent reports.

Infected endocarditis was listed as the admitting diagnosis in 0.16 to 5.4 patient per thousand hospital admission in United States. Gregoratos and Karliner, (1973).

REFERENCES


