It seems likely that such preventive measures may have wider application as we learn more about facial growth.

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Discussion

Dr. John Burke (Boston, Massachusetts): For many years the isolated techniques and approaches needed in this form of surgery were well known to the neurosurgeon and the plastic surgeon, but the actual treatment of these malformations remained largely confined to limited subcranial procedures. It remained for Dr. Paul Tessier, of Paris, to recognize that these anomalies could be safely and completely corrected by using a combined intracranial-extracranial approach.

It is to Dr. Tessier's great credit that he took it upon himself personally to instruct interested groups, primarily in this country, in these very difficult procedures. Further, the multidisciplinary team needed for the correction of these problems was rapidly formed, and in this Dr. Whitaker's group is one of the leaders.

Today, the craniofacial group is the logical outgrowth of a well-developed cleft palate team, such as has existed at the University of Pennsylvania for years, under the vigorous direction of Dr. Peter Randall.

We believe that the surgical success that Dr. Whitaker has analyzed for us today can only reflect a high degree of leadership and personal involvement on his part in each one of his patients.

It seems that there are three major groups of malformation susceptible to correction by these techniques. One is the stable form of deformity such as seen after craniofacial trauma or ablative tumor surgery. Once these abnormalities have occurred, the malformation does not progress.

The second is the congenital malformation, which has a relatively predictably constant evolutionary pattern.

The third is the group of patients which includes unstable deformities brought about by such conditions as lymphangioma, arteriovenous fistula, fibrous dysplasias, etc. These conditions are produced by capricious and unpredictable changes that are constantly presenting new problems. Dr. Remensnyder wonders if Dr. Whitaker has any thoughts on the management of this third and unstable group.

Dr. Linton A. Whitaker (Closing discussion): I'd like to try to clarify that stable lymphangioma discussion, Dr. Burke. I'm not quite sure I understood the question.

Dr. Burke: I think Dr. Remensnyder's question was, since these deformities created by lymphangioma or arteriovenous fistulas are unpredictably unstable, do you have any thoughts about their management?

Dr. Whitaker: We have used the wide exposure to resect lymphangiomas in several instances. As to stability and progression afterwards, I don't know the answer.

As to whether or not they would ever progress following resection, I think it is the same consideration you would have in doing the resection in any other fashion, with cystic hydromas or lymphangiomas.