

Where have we arrived in the care of vascular anomalies a generation after Mulliken's classification system?

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Coming together is a beginning.
 Keeping together is progress.
 Working together is success.
 —Henry Ford

About twenty years ago, the first reports of multidisciplinary vascular anomalies teams were published (1-3). These teams emanated from the pioneering work at Boston Children's Hospital (Massachusetts, USA) a generation ago and the collaborative workshops sponsored by the International Society for the Study of Vascular Anomalies. Across North America, team-based pediatric subspecialty care for complex disorders has emerged as the standard, with most children's hospitals now offering multidisciplinary teams for conditions such as cleft palate, meningomyelocele, congenital heart disease and pediatric oncology. A vascular anomalies team's membership generally consists of plastic and general surgeons, dermatologists, as well as diagnostic and interventional radiologists, with ad hoc members from other subspecialties as required; several teams have assembled across Canada over the past few decades.

Although many centres have developed such teams, children with vascular anomalies still remain orphans in the medical system. Because no specialty 'owns' the anatomical area where these clinical entities reside, affected children often become nomads, referred by well-intending practitioners from clinic to clinic without a definitive diagnosis or thoughtful treatment plan. This tendency may, in part, be due to the lack of clear understanding of vascular anomalies by the broader medical community. Although the landmark article by Mulliken and Glowacki (4) published 30 years ago in *Plastic and Reconstructive Surgery* described the biological characteristics of hemangiomas and vascular malformations, and has emerged as the most cited paper in plastic surgery (5), a gap remains between this basic theory and clinical practice. Antiquated nomenclature, erroneous diagnoses and wayward treatment regimens remain prevalent across both medical and surgical specialties (6,7).

Nonetheless, in the current issue of the *Canadian Journal of Plastic Surgery*, the efforts of Fraulin et al (8) (pages 67-70) are to be applauded for not only caring for children in this multidisciplinary format, but for taking the additional step of auditing and sharing these data with their colleagues. The results they present and the conclusions they draw are not unlike those of other authors (1,6). Whereas the management of hemangiomas, generally more straight forward and predictable, have undergone a paradigm shift both medically toward propranolol as primary therapy (9-11) as well as surgically with more aggressive indications for complicated (12) or aesthetically more sensitive lesions (13), vascular malformations remain at the zenith of reconstructive challenges, exhibiting a less predictable natural history, higher recurrence rates and a more severe complication profile (14). This articles' true strength might be found in the database the authors have constructed; for rare diseases, such as vascular malformations (venous, lymphatic, capillary, mixed, and/or arteriovenous), careful study and scrutiny of natural history, outcomes and complications are best performed through the utility of a practical database.

The efforts of these authors exemplify the words by Henry Ford above: through working in a team setting, success can be achieved as the ultimate end result. We should be proud of the advances to date; however, hope remains that for our patients with vascular anomalies, the generation ahead would offer greater successes through leveraging this basic foundation of team-oriented care. In taking one step further via disseminating this knowledge widely across all medical and surgical specialties, through pushing both basic science and translational research and by being at the vanguard of both surgical and nonsurgical treatment options, when works are audited a generation from now, similar trends in the literature (6,7) could become the exception not the norm.

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