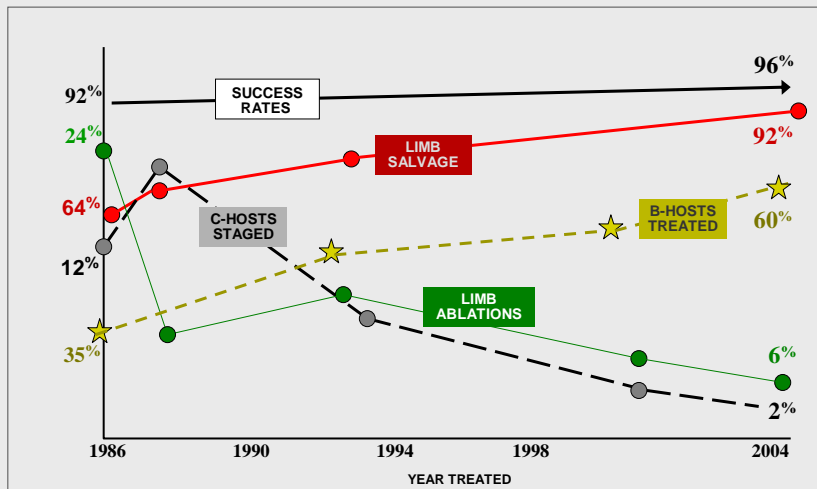


OSTEOMYELITIS:

Treatment Outcomes and Trends (1986 - 2004)



REOrthopaedics, Inc.
San Diego, CA

Experience, advances in technology and new pharmaceuticals have broadened the selection criteria for limb-salvage protocols. Over the last twenty-five years, our success rates have remained relatively constant despite there being a significant increase in the percentage of B-hosts operated and the actual number of patients offered limb salvage vs ablation or palliation (C-hosts).

314 BONE DEFECTS:

Methods of Reconstruction (2003 – 2008)

INTERNAL FIXATION
ALLOGRAFTS
PROSTHETIC JOINTS
32%

METHODS
OF ILIZAROV
25%

CANCELLOUS
BONE GRAFTS
16%

VASCULARIZED
BONE GRAFTS
11%

PERMANENT
ACRYLIC SPACERS
8%

REOrthopaedics, Inc.
San Diego, CA

PERI-PROSTHETIC TOTAL JOINT INFECTIONS
(No. 194)

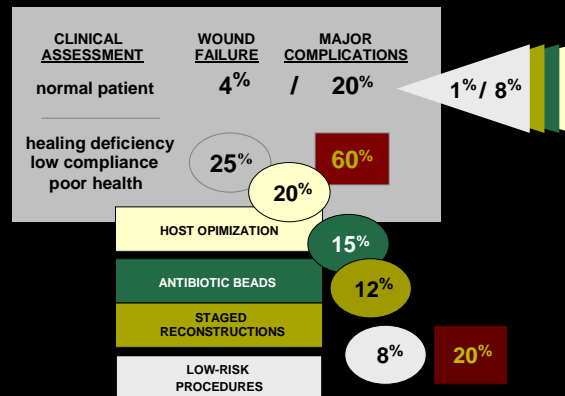
1996-2007		
TOTAL JOINTS	NO	%
Hip	73	38
Knee	109	56
Shoulder	8	4
Elbow	4	2

176 REVISION ARTHROPLASTIES (1996-2007)											
PATIENT COHORT	NO	2yr SUCCESS RATES									
A-host	55	97%									
B-host	121	87%									
<table border="1"> <tbody> <tr> <td>< 3 co-morbidities</td> <td>94</td> <td>93%</td> </tr> <tr> <td>≥3 co-morbidities</td> <td>27</td> <td>66%</td> </tr> <tr> <td></td> <td>121</td> <td></td> </tr> </tbody> </table>			< 3 co-morbidities	94	93%	≥3 co-morbidities	27	66%		121	
< 3 co-morbidities	94	93%									
≥3 co-morbidities	27	66%									
	121										

Of the 194 late-occurring, peri-prosthetic infections treated at our centers, there were 176 revision arthroplasties, 8 primary fusions, 4 primary amputations and 3 patients treated palliatively. Of the 18 overall treatment failures, 50% occurred in B-hosts with 3 or more co-morbidities that affected wound healing. The overall success rate was 90%, for the 176 revision protocols.

REOrthopaedics, Inc.
San Diego, CA

PROTOCOLS AFFECTING PATIENT OUTCOMES
(1981 – 2006)



REOrthopaedics, Inc.
San Diego, CA

Methods and surgical principles used over the last 25 years to improve the Outcomes in patients treated for infection. Although the results improved for normal patients, the increase in success and decrease complications for the patients with wound-healing disturbances is statistically significant.

2207 TREATMENT CANDIDATES: 1981-2007
 (success at ≥ 2 years)

<u>Stage</u>	<u>SUCCESS RATE</u>	<u>Stage</u>	<u>SUCCESS RATE</u>
IA (51)	100%	IB (71)	96% (3)
IIA (88)	100%	IIB (194)	91% (17)
IIIA (209)	97% (6)	IIIB (139)	96% (6)
IVA (595) (943)	99% (6) 99%	IVB (860) (1264)	90% (83) 91%

REOrthopaedics, Inc.
 San Diego, CA

The treatment success rates for A-hosts (normal) is now 99%. More importantly, when applying the methods and principles shown above, the 2-year failure rates for B-hosts (compromised) has decreased, over time and with experience, from 25% to 9% and the complication rate from 60% to 20% despite a B-host cohort of over 57%. This further stresses the importance of tailoring each operation to the physiologic capabilities of the patient, the skills of the surgeon and resources within the facility.