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Carlos J Almada* (almada_carlos@colstate.edu), Department of Mathematics, Columbus State University, 4225 University Ave., Columbus, GA 31907. *A remark on a result by Kato.*

In this work we show how some of the ideas developed by Kato in his theory of evolution equations to solve the Cauchy problem for quasi-linear hyperbolic equations can be applied to solve a similar problem in the context on semilinear wave equations on globally hyperbolic manifolds $(M^{1+n} = \mathbb{R} \times S, g)$. To prove our results we make some assumptions on the manifold S to guarantee that the usual Sobolev embedding theorems and properties of uniformly local Sobolev spaces introduced by Kato are satisfied on S . (Received August 23, 2005)